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HIGHER COMMERCIAL INSTRUCTION, BY JOHN YE

CHART of the WORLD'S PRODUCE from the

(The Products in italics are especially Abundant and

CONTINENTS.	COUNTRIES.	Reference Number.	LOWER OR INANIMATE KINGDOM. MINERAL.	
			NATIVE.	MANUFACTURED.
EUROPE.	**British Isles,** *viz.:* England and Wales, Scotland and Ireland	1	*Coal, salt, tin, iron, alum, Epsom salt,* manganese, copper, lead, zinc, gypsum, septaria, serpentine, kaolin, fireclay, hones, freestone, granites, marbles (Derbyshire), Bath and Portland stone, dolomite, slates, flagstones, millstones, coprolites, paraffin shales, peat, lignite, jet, *graphite* (or plumbago), *heavy spar, fluor spar* (Derbyshire spar), rottenstone, *bathbricks, basalt,* pipeclay, *fuller's earth, ochres.*—Yield of metals, £32,000,000 per annum.—*Mineral waters:* Chalybeated at Brighton, Tunbridge Wells, Bath; salo-carbonated at Cheltenham; sulphurated at Harrowgate, Askern, Moffat, Gillesland; saline (with sulphate of magnesia) at Epsom. *N.B.*—Notwithstanding the enormous yield of metals, little is exported owing to the great home-consumption.	*Metal plates* (iron, tin, copper, steel, zinc), *cast iron,* tin, iron, and copper goods, *iron ships, engines, cutlery, machinery, guns,* muskets, swords, *tools, pins, needles, nails, bolts, screws, tin* and *copper smelting,* chemicals, soap, *gunpowder, potteries,* marble slabs, *slates,* granite quarries.
	Austrian Empire	2	*Silver, lead,* tin, graphite, baryte, bismuth, cobalt, arsenic, lignite, jet, amber, sapphire, topaz, garnet, *nickel, alum, Bilin infusorial earth* (Austria—Bohemia), *salt, iron, mercury, copper, silver,* zinc, gold, soda, borax, coal, opal, beryl, nickel, arsenic, lead, *antimony,* natron, heavy spar, *glauber salt, Epsom salt, manganese* (Hungary—Transylvania).—*Mineral waters:* Alkalo-saline at Töplitz, Huniadi Janos; carbonated at Seidlitz.	*Bar iron, castings,* rails, sheet and plate iron, knives, *scythes, glass,* porcelain, steel and iron factories, *saltpetre beds* of Hungary, gold and silver wares, chemicals, gunpowder.
	Denmark	3	Fuller's earth, salt, *amber, peat* (Denmark), *Iceland spar,* sulphur, sal ammoniac, obsidian (Iceland).	Iron castings, brass and tin wares, firearms, needles, soap, glass, Jutland earthenware.
	France	4	*Gypsum, iron,* coal, lead, salt, marbles, Caen limestone, copper, bismuth, manganese, chromium, millstones, slates, coprolites, jet, amber, peat, kaolin, paraffin shales, *alum, sandstones.*—*Mineral waters:* Carbonated at Vichy and St. Galmier; sulphurated at Barèges.	*Fancy articles, trinkets, iron ships, Creusot's ironwork, jewellery,* anchors, cutlery, hardware (St. Etienne), pottery, glass work, *porcelain* (*Sèvres* and *Limoges*), *clocks,* watches, *saltpetre beds* prepared by mixing manure rich in ammonia with earth rich in potash.
	Germany	5	*Lithographic stones,* salt, antimony, bismuth, gypsum, mercury, *iron,* copper, *zinc* (South),—*lead, copper, iron,* coal, cobalt, arsenic, zinc, tin, silver, chromium, topaz, *jet, amber, peat,* alum, kaolin, slates, millstones, *nickel, bismuth, boracite, salt,* fluor spar, sulphur, *basalt, greenstone, hones* (Centre and North).—*Mineral waters:* Carbonated (with magnesia, soda, &c.) at Baden, Carlsbad, Seltzer, Pullna, Friedrichshalle, Apollinaris; sulphurated at Aix-la-Chapelle.	*Iron,* copper, zinc, and *brass* work, *guns* and *machinery* (especially Krupp's at Essen), glass, *porcelain* (Dresden), *muskets, swords,* cheap cutlery, watches, soap, needles, machinery (Saxony), *vitriol, Prussian blue, chemicals,* saltpetre beds.
	Hellenic Peninsula. *North* (New Nationalities). *Centre* (Turkey). *South* (Greece)	6	*Petroleum,* gold, copper, zinc (North), *copper, silver* (Centre), salt, alum (South), *statuary marble* (Paros).	Pottery, soap (Crete), *firearms, weapons,* earthenware (Turkey), shipbuilding, cutlery, firearms, earthenware, pottery, *gold* and *silver embroidery* (Greece).
	Iberic Peninsula. Spain (East). Portugal (West)	7	*Mercury, lead, iron, silver, salt hills,* copper, arsenic, saltpetre, tin, *platinum,* antimony, manganese, jet, *zinc,* phosphatic nodules, *graphite,* sulphur, *salt, Epsom salt,* drawing slate (East),—*salt of salinas,* asphalt (West), lead (Azores).	Toledo hardwares (*swords,* &c.), *jewellery,* porcelain, ironware, *earthenware,* glass, bricks, refined petroleum, gunpowder (Spain), armour, porcelain, *earthenware,* copper and tin ware, soap, glass, jewellery, *precious stone-cutting,* shipbuilding (Portugal).
	Italic Peninsula	8	*Sulphur, Carrara marble, borax, pumice,* alum, arsenic, *sal ammoniac, pouzzolane,* serpentine, saltpetre, whetstone, iron, lead, antimony, manganese, gypsum, lignite, petroleum, amber, trass, *tufa, talc,* ochres, drawing slates, *statuary* and *verd antique* marbles (Carrara, &c.)	Florence porcelain, Venice beads, *mosaics,* musical strings, glass, soap, *statuary, castings in plaster, majolica ware,* brass work, chemicals, gunpowder, *jewellery,* nails, pins.
	Disunited Provinces Belgium	9	*Iron, coal,* lead, *zinc,* millstones, slates, *kaolin, fireclay,* manganese, *black marble, sandstones.*	*Iron goods, cutlery,* nails, stone quarrying, bricks, tiles, porcelain, *machinery,* firearms.
	Holland	10	*Peat* (the chief fuel), potter's earth.	*Diamond cutting* (Amsterdam), refined salt, *earthenware,* glass, *tobacco pipes* (Gouda).
	Russia	11	*Iron, alum, gold, lead, copper, platinum, petroleum, naphtha,* coal, diamonds, topaz, saltpetre, sulphur, silver, iridium, *mica plates,* rock salt (Poland), briny lakes (Lower Volga).	*Iron* and *copper smelting* (Perm), *firearms, swords,* cutlery, iron work (Tula), glass, porcelain, soap, jewellery.
	Scandinavia	12	Cobalt, chromium, hones, alum, *marbles, copper, iron,* lead, salt, silver, *magnetic iron* (Norway), gold, silver, cobalt, lead, *porphyry,* zinc, bismuth, nickel, bergmahl (infusorial earth), *copper, iron,* coal, salt, *magnetic iron,* tin, arsenic (Sweden).	Saltpetre beds in Sweden, *steel* work (Dannemora), glass, earthenware, *ironwork* (Gottland), bricks (Norway).
	Switzerland	13	*Granites, sandstones, rock salt* at Bex, *asphalt* (Val de Travers), sulphur, jet, limestone, alabaster, gypsum, iron (in Jura), nickel, cobalt.—*Mineral waters* (sulphureous) at Louèche.	Hardware, iron and copper work, machinery, *watches* and *musical boxes.*
AMERICA.	**British** N.W. Territory (*a*) Manitoba (*b*) Columbia (*c*)	1	*Coal* (*a*),—copper, iron, marble, plumbago, *coal,* and *gold* (*c*).	... ...
	Canada and **Hudson's Territory**	2	*Iron, coal, copper, gypsum, petroleum, plumbago,* slates, labradorite, serpentine-marble, manganese, heavy spar or baryte, lignite, basalt, silver, gold, lead, tin, lithographic stones, *marbles,* greenstone, *salt.*	Soap, iron-castings, hardware, cutlery.
	Alaska (*a*) and **Greenland** (*b*)	3	Cryolite (fluoride of aluminium), *graphite,* asbestos (*b*).	... ...
	United States	4	*Coal* and *iron* (Pittsburg, &c.), *copper, gold, petroleum,* sandstones, baryte, *marbles, lead, salt, mercury,* chromium, silver, zinc, Epsom salt, beryl, jet, serpentine, basalt, bergmahl, *talc,* graphite, *jade, alum, kaolin,* nitre, fluor spar, dolomite.—Sulphur springs.	*Iron* work, castings, glass work, pottery, brickwork, soap, *mineral oils* purified.
	Mexico	5	*Silver, gold, mercury, carbonate of soda* (for smelting silver ores), copper, iron, lead, topaz, *obsidian,* asphalt, *jade, natron,* graphite.	*Earthen* and *stoneware,* glass, gold and silver lace, silver ores smelting.
	Central America	6	*Silver,* gold, *obsidian,* iron, lead, mercury, marble, jasper, sulphur, salt.	... ...
	Antilles, or **West India Islands**	7	*Sulphur* (Guadeloupe and Martinique), *petroleum* (Barbadoes), *asphalt* (Trinidad), coal, copper, and *salt* (Cuba), salt (Curaçao), platinum (St. Domingo), *phosphatic nodules* (Sombrero).	... ...
	Guiana	8	Fine kaolin clay for pottery, agates, rock crystal, edible infusorial clay.	... ...
	Venezuela (*a*), **Columbia** (*b*), and **Ecuador** (*c*)	9	Copper, coal, salt, asphalt, carbonate of soda, petroleum (*a*),—silver, emerald, gold, salt, nitrate of soda, copper, platinum, lead, iron (*b*).	Pottery (Ecuador).
	Peru (*a*) and **Bolivia** (*b*)	10	*Silver, gold, guano, nitrates,* saltpetre, *mercury,* copper, salt, sulphur, tin, platinum, *borax,* asphalt, obsidian, *cubic nitre* (*a*),—*silver, nitre beds, diamonds,* gold, mercury, borax, tin, copper, lead, iron, emerald (*b*).	... ...
	Brazil	11	*Diamonds, gold, emerald, ruby, topaz, beryl,* garnet, amethyst, copper, *iron, salt,* silver, platinum, *saltpetre,* palladium, chromium.	*Diamond* and *precious stone cutting.*
	La Plata Argentine (*a*) Para - Uruguay (*b*)	12	*Silver,* gold, nickel, copper, tin, lead, iron, coal in North-West (*a*),—carbonate of soda (*b*).	... ...
	Chili (*a*) and **Patagonia, Falkland** (*b*)	13	*Silver, copper, coal,* gold, platinum, borax, cubic nitre, *Epsom salt, saltpetre, nitrate of soda* (*a*).	*Earthenware jars* (Chili), copperware, soap.

CONTINENTS.	COUNTRIES.	Reference Number.	INTERMEDIATE OR SUB-ANIMATE VEGETABLE.							
			ALIMENTARY.				ALIMENTARY OR INDUSTRIAL, OR BOTH.			
			ESSENTIAL.		AUXILIARY.					
			Solid.	Liquid.	Spices and Seasonings.	Medicines and Narcotics.	Gums and Resins.	Oils (Fixed and Volatile), with Wax and Vegetable Butter and Tallow.	Reference Number.	Struc and
EUROPE.	**British Isles,** *viz.:* England and Wales, Scotland and Ireland	1	Corn (wheat, oats, barley, rye), vegetables (potato, cabbage, turnip, carrot, parsnip, pea, bean, + Irish moss, &c.), fruit (apple, pear, plum, cherry, strawberry, currant, &c.). Corn and fruits all insufficient for home consumption.	*Beer* (ale, stout, porter), *spirits* (gin, whiskey), *wines* (home-brewed).	No true spices, but the following seasonings: garlic, onion, leek, shallot, *mint, celery,* parsley, savoury, *sage,* marjoram, *thyme,* mustard (green), garden and water cress, *samphire,* tomato, mushrooms, and various pickles, + caraway and coriander.	No important native ones but *dandelion* (extract of root) and chamomile, mustard; belladonna, foxglove, hellebore, ergot of rye, &c. (poisons).	... ...	*Rape-seed oil*—Verbena, *lavender,* bergamot, heliotrope, and other perfumes.	1	Oak, el larch.
	Austrian Empire	2	*Wheat, rye,* millet, *potato sago,* maize, *flour* (Danube plain).	*Beer* (*Vienna, Lager,* and *Pilsen*), *wines* (*Tokay,* Karlovitz).	Common seasonings.	Tobacco, + poisons (belladonna, &c., as above).	... ...	Olive oil (South).	2	*Timber* Bohe
	Denmark	3	Oats, *peas, beans, lentils,* rye, wheat, *barley,* buckwheat.	Cherry brandy.	... ...	... ...	... ...	*Rape-seed.*	3	
	France	4	*Wheat, plum, truffle of Perigord, olive,* apple, pear, apricot, orange, beetroot sugar, fig, maize, onion, + barley, *walnut, chestnut,* + cherry.	*Wines* (*Burgundy, Bordeaux,* Rousillon, Rhône, *Champagne*), *cognac,* cider, *liqueurs, vinegar,* verjus.	*Aniseed,* common seasonings.	*Linseed, chamomile,* tobacco, + poisons (as above).	*Pitch,* turpentine, tar.	*Olive, linseed, rape, colza,* walnut, + aniseed, + *lavender,* and other perfumes.	4	Fir, be
	Germany	5	*Barley, peas, beans, lentils* (North),—*wheat,* oats, rye, buckwheat, beet sugar, saurkraut (North and South),—*chestnut,* potato sago, *walnut,* cherry (South).	*Beer* (Strasburg, *Munich*), *wines* (*Rhine, Moselle,* and Tauber), *kirschwasser* of Black Forest.	*Coriander* and aniseed, *caraway seed, white mustard,* common seasonings.	*Linseed, chamomile,* tobacco, + poisons (as above).	*Pitch,* tar.	Caraway, *anise, peppermint,* thyme, *linseed, rape, walnut, hazelnut,* colza, beechnut, + *lavender* and *Eau-de-Cologne.*	5	*Fir,* Harz tree,
	Hellenic Peninsula. *North* (New Nationalities). *Centre* (Turkey). *South* (Greece)	6	*Wheat, rye,* millet, maize (North),—*fig, olive,* corn, d[illegible], almond, *chestnut, lemon,* melon, currant (Centre),—*currant, orange, dried fruit* (South).	Cretan and Chios wines, *Maraschino* (South).	Common seasonings.	*Linseed, opium,* tobacco (Centre),—tobacco (South),—+ poisons as above (South and Centre).	Gums (Centre and South).	*Attar of roses,* linseed, olive (Centre),—*olive* (South).	6	Fir and *borne* South
	Iberic Peninsula. Spain (East). Portugal (West)	7	Olive, fig, Barcelona nut, wheat, rye, raisin, orange, almond, chickpea, chestnut, grape, lemon, melon, onion (East).—grape, orange, fig, chestnut, olive, lemon, onion (West);—pineapple, orange (Azores).	Malaga, *Jerez,* or sherry, Alicante (East), *Oporto,* or *port wine* (West).	*Aniseed* (East),—common seasonings.	Linseed, *liquorice* (East),—+ poisons as above (East and West).	... ...	*Olive,* linseed, hazelnut, *aniseed, caraway* (East),—*olive* (West).	7	Variou
	Italic Peninsula	8	*Macaroni, vermicelli, olive, orange, lemon, corn, carob bean, grape,* apricot, *almond, fig, chestnut, truffle, morel,* raisin, *rice,* melon, hazelnut, *walnut.*	*Marsala,* Falerno, Lachryma Christi, *Vermouth.*	*Coriander* and *aniseed.*	Linseed, *liquorice,* + poisons as above.	Turpentine.	*Olive,* linseed, *anise* and *caraway,* + perfumes.	8	Walnu
	Disunited Provinces Belgium	9	Corn.	Beer (*Faro*).	... ...	... ...	... ...	... ...	9	Oak.
	Holland	10	Buckwheat, beetroot sugar, rye, *oats, peas, beans, lentils,* cherry, currants, &c.	*Dutch gin* of Schiedam, Curaçao.	Coriander and caraway seeds.	*Chamomile.*	... ...	... ...	10	Oak.
	Russia	11	*Wheat, rye,* oats, barley, beetroot sugar, buckwheat.	Koumiss (Crimea), *wodka,* mouchamore, spruce beer, spirits of juniper berries.	Common seasonings.	*Linseed,* + poisons as above.	*Pitch, tar.*	*Linseed.*	11	*Timber* birch (Cent
	Scandinavia	12	Rye, oats, buckwheat, Irish moss.	Spruce beer (Norway), spirits of juniper berries.	... ...	... ...	*Pitch, tar, turpentine,* resin.	Beechnut.	12	*Timber* *larch,*
	Switzerland	13	Fruit abundant in valleys (apple, walnut, cherry, *chestnut,* &c.)	Wines of La Côte, Neuchatel, Muscat of Valais, + *absinthe* of Neuchatel, and Kirschwasser.	Common seasonings.	Chamomile, borage, + poisons as above.	Pitch, turpentine.	Beechnut, walnut, and linseed.	13	*Timber*
AMERICA.	**British** N.W. Territory (*a*) Manitoba (*b*) Columbia (*c*)	1	*Corn* (chiefly barley) (*b*).	... ...	... ...	... ...	... ...	... ...	1	*Fine pi*
	Canada and **Hudson's Territory**	2	*Wheat, barley, flour,* oats, *maple sugar, peas, beans, lentils.*	Beer, whiskey, &c.	... ...	... ...	*Canada balsam.*	Myrtle or candleberry wax.	2	Pine, *bi* larch, *black*
	Alaska (*a*) and **Greenland** (*b*)	3	... ...	... ...	... ...	... ...	... ...	... ...	3	
	United States	4	*Wheat, flour, rice, ground nut,* arrowroot of zamia, *maize,* barley, *millet, sugar-cane, hickory nut,* + *fine grape, orange,* pear, &c., in Far West.	*Beer* (chiefly *Lager*), whiskey, and various other drinks.	... ...	*Tobacco* (Virginia, Maryland).	*Tar, turpentine.*	*Thyme, peppermint.*	4	*Timber* *pencil* Wellin
	Mexico	5	*Maize,* millet, *sugar, wheat,* batata, grenadilla, jambose, pineapple, banana, cassava, *yam,* mango, custard apple, guava, *tamarind,* plantain, grape, arrowroot, tapioca, avocado pear.	Coffee, *cacao,* agave (intoxicating octli).	*Vanilla, capsicum.*	*Jalap, cashew-nut, sarsaparilla,* tobacco.	... ...	Cacao butter.	5	*Mahogan*
	Central America	6	*Rice,* maize, *arrowroot,* tapioca, batata, pineapple, sugar-cane, + most of the fruits of South Mexico.	Coffee, *cacao,* agave (intoxicating octli).	*Vanilla.*	*Sarsaparilla.*	Gums, *india-rubber,* balsams.	Cacao butter.	6	*Fine ti* *Ameri*
	Antilles, or **West India Islands**	7	*Sugar, molasses, pineapple, banana, wheat, arrowroot,* tapioca (manioc), orange, batata, plantain, rice, yam, *tamarind,* pomegranate, lemon, *millet, plantain,* mango, *guava,* + other fruits of Mexico.	*Cacao,* coffee, *rum.*	*Pepper, ginger,* cassia, cloves, capsicum, *pimento* (allspice), mace, chillies.	*Tobacco, sarsaparilla, aloes* (Barbadoes), castor oil, *croton oil, cascarilla bark.*	*Pitch* of Trinidad, aloes.	Cacao butter (Trinidad), castor and *croton* oils.	7	*Mahogan* *wood,* *cedar,*
	Guiana	8	*Sugar-cane, molasses, yam,* cassava, arrowroot, tapioca, rice, maize, + most fruits of Mexico.	Agave (intoxicating octli), *rum,* coffee, *cacao,* assai (cooling beverage of a palm).	*Cayenne, vanilla, cloves,* cinnamon.	Tobacco, *Tonquin bean.*	... ...	Cacao butter, carapa oil or butter.	8	*Fine m* *satin*
	Venezuela (*a*), **Columbia** (*b*), and **Ecuador** (*c*)	9	*Sugar-cane, plantain, arrowroot, tapioca,* batata, maize, *yam,* rice, + most fruits of Mexico.	*Cacao,* coffee, assai, agave (intoxicating).	Cinnamon, *vanilla.*	Tobacco, *cinchona, cedron,* jalap.	Gums, resins, *india-rubber.*	Cacao butter.	9	*Ebony,* hogany wood.
	Peru (*a*) and **Bolivia** (*b*)	10	*Arrowroot, tapioca, batata,* rice, maize, guava, *and most tropical fruits* (plantain, banana, &c. &c.; see Mexico).	Assai beverage, agave (intoxicating drink from Agave Americana).	*Vanilla* (*a*).	*Cinchona bark, coca leaf,* tobacco, sarsaparilla, *ipecacuanha,* jalap.	Gums, resins, *gum copal* or *copal balsam,* caoutchouc.	... ...	10	
	Brazil	11	*Sugar-cane, rice, arrowroot, tapioca, wheat, sago, Brazil nut,* banana, olive, grape, maize, pineapple, tamarind, yam, and most of the fruits of Mexico.	Agave (intoxicating), guarana tea, *coffee, cacao,* assai (nourishing and cooling drink from Euterpe Oleracea).	*Vanilla.*	Cinchona, *tobacco, ipecacuanha, sarsaparilla.*	*Caoutchouc,* gums.	Cacao butter, wax of carnahuba palm, palm oil.	11	*Snake-w* wood, palm.
	La Plata Argentine (*a*) Para - Uruguay (*b*)	12	*Algaroba bean, wheat,* oats (*a*),—sugar-cane (*b*),—and most European fruits (*a, b*).	Chica from algaroba bean, *yerba maté* tea (*a, b*).	... ...	Tobacco (*b*).	... ...	... ...	12	Timber (
	Chili (*a*) and **Patagonia, Falkland** (*b*)	13	*Wheat,* maize, *flour,* oats, *European fruits* (fig, orange) (Chili).	... ...	... ...	... ...	Pitch, turpentine.	... ...	13	

TION, BY JOHN YEATS, LL.D., F.G.S., F.S.S., &c.

E from the THREE KINGDOMS of NATURE.

lics are especially Abundant and Exportable.)

TERMEDIATE OR SUB-ANIMATE KINGDOM. VEGETABLE.									CONTINENTS.	COUNTRIES.	Reference Number.	HIGHER OR ANIMATE KINGDOM. ANIMAL.					Reference Number.
ALIMENTARY OR INDUSTRIAL, OR BOTH.		Reference Number.	INDUSTRIAL.									INDUSTRIAL.			ALIMENTARY OR INDUSTRIAL, OR BOTH.	ALIMENTARY.	
Gums and Resins.	Oils (Fixed and Volatile), with Wax and Vegetable Butter and Tallow.		Structural (Building and Cabinet Wood).	Tanning.	Tinctorial.	Textile.	Fibrous Manufactures.	Various Industries.				Various Industries.	Textile and Tinctorial. +	Skins, Furs, Feathers, Ivory, Antlers, &c.	Oil and Wax.	Liquid Food: Milk of Reindeer, Sheep, Goat, Ass, Mare, Cow, Llama, Camel, or Dromedary, according to Latitude. Solid Food.	
... ...	*Rape-seed oil*—Verbena, *lavender*, bergamot, heliotrope, and other perfumes.	1	Oak, elm, beech, Scotch fir, larch.	Oak-bark.	Woad.	Flax (Ireland).	*Calico prints*, *white calico*, *cotton yarns*, ribbons, cotton and *linen* fabrics, *hosiery*, sail-cloth, *paper*, poplins (Ireland), jute and hemp goods (Scotland), — millinery, *haberdashery*, *mixed cotton* and *linen* stuffs.	*Ship-building* (England and Scotland), *sugar-refining* (Scotland), matches, calico-printing, *biscuits*, *jams*, *marmalades*, *pickles*, *soaps*, pomatums, toilet powders, *colonial trade*.	EUROPE.	**British Isles**, *viz.*: England and Wales, Scotland and Ireland	1	*Ribbons*, fringes, *carpets*, *blankets*, *worsted*, silk lace, silks, boots and shoes, *mixed woollen stuffs*, tanneries (England), plaids, *tweeds*, and *shawls* (Scotland).	... ...	Eiderdown (Scotland and North of Ireland), ox-hides, sheepskins, horns, hoofs, bones, all greatly below the demand.	*Whale* and *seal* oils (Scotland).	Swine, bacon, lard, butter (Ireland),—ox, sheep, cheese, butter (England),—ox, sheep, game, *salmon* (Scotland), all insufficient, as also poultry and eggs,—sprat, whitebait, pilchard, mackerel, cod, sole, haddock, oyster (East and South coasts chiefly).	1
... ...	Olive oil (South).	2	*Timber* (fir, pine, oak, &c.), Bohemia—Transylvania.	*Gall-nut*, valonia oak.	... ...	*Flax* and *hemp* (Hungary).	Only flax and hemp goods for home use.	*Potash*, *pearl-ash*, saw-mills, *potato sago*, *confectionery* (in Austria), amadoue tinder.		**Austrian Empire**	2	*Woollen goods* (Moravia), leather.	*Wool*, merino, silk (South).	Hoofs, *horns*, *antlers*.	... ...	Sheep, cattle in the Danube plain.	2
... ...	*Rape-seed.*	3	... ...	... ...	... ...	... ...	... ...	... ...		**Denmark**	3	... ...	Wool.	Feathers, *down*, hides, skins, whalebone, pig's bristles.	Porpoise, seal and whale oils.	Salt beef and pork; sheep, *ox*, *hog*, *fish* (flounders).	3
Pitch, turpentine, tar.	*Olive*, *linseed*, *rape*, *colza*, walnut, + aniseed, + *lavender*, and other perfumes.	4	Fir, beech, oak, &c.	... ...	*Alkanet root*, safflower, *woad*, madder.	Hemp, hemp flax.	Linen, cotton goods, *ribbons*, *lace*, hemp cloth, *millinery*, *dresses*.	Fuller's teazel, cork, *crystallised fruits*, *bonbons*, *confectionery*, *costly toys*, soaps, *cosmetics*, *scents*, pomatums, toilet powders.		**France**	4	*Woollen goods* (North), *silk goods* (South), *lace*, ribbons, *gloves*, *shoes*, dresses, wigs.	*Silk*, human hair.	Pig's bristles, human hair.	Wax (South).	*Poultry*, *sardines*, honey, *oysters*, *eggs*, *butter*, *Camembert* cheese.	4
Pitch, tar.	Caraway, *anise*, *peppermint*, thyme, *linseed*, *rape*, *walnut*, *hazelnut*, colza, beechnut, + *lavender* and *Eau-de-Cologne*.	5	*Fir*, *pine* (Black Forest, Harz) + beech, oak, walnut tree.	Oak-bark.	*Alkanet root*, woad, *madder*.	*Hemp*, *flax*.	Linen and cotton goods, linen yarn (Silesia and Alsace-Lorraine),—flax goods (Silesia), paper.	*Fuller's teazel*, *toys*, *wooden clocks*, charcoal, peat and tinder), *pearl-ash* (Black Forest), shipbuilding (free towns), *book* and *printing trade* (Saxony), tobacco manufactories, sugar-refining, cotton spinning, *amber goods*.		**Germany**	5	*Woollen* and silk goods of Saxony and Silesia.	*Wool*, human hair.	Pig's and boar's *bristles*, *quill-pens*, *antlers* of deer, human hair.	Beaver's *castoreum*, wax.	Butter, *salt meat*, honey, *cattle*, sheep (South), *bacon*, *swine*, *hams* of swine and boar.	5
Gums (Centre and South).	*Attar of roses*, linseed, olive (Centre),—*olive* (South).	6	Fir and pine, beech (North),—*boxwood*, oak (Centre and South).	*Valonia oak*, *gall-nut* (Centre),—valonia oak (South).	*Madder*, safflower, yellow berries (South and Centre).	Cotton, *flax* (Centre),—cotton (South).	... ..	Tobaccos (Centre and South).		**Hellenic Peninsula.** *North* (New Nationalities). *Centre* (Turkey). *South* (Greece)	6	Turkey *carpets*, spun silks, morocco leather, *sandals*, tanned skins, *sponge* and *coral*.	Wool, goat's hair (North), — *silk* and *wool* (Centre and South).	Turtle shells (South),—*raw skins* (Centre),—*coral* and *sponges* (South).	*Wax* (Centre and South).	Cattle, swine, *honey* (North and Centre),—sheep (North chiefly),—turtle shell and *honey* (South).	6
... ...	*Olive*, linseed, hazelnut, *aniseed*, *caraway* (East),—*olive* (West).	7	Various.	... ...	Safflower, *madder* (East and West).	... ...	... ...	*Cork*, from cork-oak (East and West), — *barilla soda* (salsola kali) (East).		**Iberic Peninsula.** Spain (East). Portugal (West)	7	Morocco leather (East).	*Silk* and *wool* (merino) (East and West),—cochineal (East) +	Antlers, porcupine quills (East).	... ...	*Sardines*, tunny fish (West),—honey.	7
Turpentine.	*Olive*, linseed, *anise* and *caraway*, + perfumes.	8	Walnut, oak, &c.	Oak-bark.	Safflower, madder, *sumach*.	*Hemp*, *flax*.	Paper.	*Leghorn hats*, orris root for violet powder, cork, *fuller's teazel*, potash.		**Italic Peninsula**	8	Silk goods, *straw plaits*, spun silks, imitation cameos, *coral*.	*Silk*, wool.	Porcupine quills, *coral*.	Wax.	*Anchovies*, *Gorgonzola cheese*.	8
... ...	... ...	9	Oak.	*Oak-bark.*	... ...	*Flax*, hemp.	*Linen* and hemp goods and cambric (Ghent),—*cotton goods* (Brussels and Malines).	Sugar-refining, cultivation of clover for seeds.		**Disunited Provinces** Belgium	9	Lace and *carpets* (Brussels), woollen goods.	... ...	... ...	... ...	*Rabbits* (Ostend), cattle, *butter*, *Limburg cheese*.	9
... ...	... ...	10	Oak.	*Oak-bark.*	*Madder*, Tartar lichen.	*Flax*, hemp.	*Holland linen*, *tow*.	Clocks, toys, *shipbuilding*, *colonial trade*, *fuller's teazel*, *bulbs* of *tulip*, *hyacinth*, and *crocus*, clover for seeds, *bull* and *Dutch rushes*.		Holland	10	Woollen cloth (Haarlem and Leyden), leather.	... ...	... ...	... ...	*Cattle*, *sheep*, *cannon-ball cheese*, *cured herrings*, *stock-fish* (cod), *turbot*, *butter*.	10
Pitch, *tar*.	*Linseed.*	11	*Timber* and *deals*—pine, fir, birch (North), oak, elm, lime, (Centre).	... ...	... ...	*Hemp*, *flax*, *bast* of lime tree.	*Cordage*, *sail-cloth*, *bast bags*, *bast ropes* and *twines*.	*Pearl-ash*, *bast mats*.		**Russia**	11	*Leather*, brushes.	*Wool*, human hair.	*Furs* (sable, bear, wolf, fox, deer), down, feathers, horse-hair, *eiderdown*, quills, *hides*, *horns*, hoofs, *antlers*, *bristles*, skins.	*Wax*, oils (whale and seal), *tallow*, *castoreum*.	*Cattle*, *sheep*, *swine*, fish, *sturgeon* (with *caviare* and *isinglass*), *honey*.	11
Pitch, *tar*, *turpentine*, resin.	Beechnut.	12	*Timber* and *deals*—*pine*, *larch*, fir, oak.	*Oak-bark.*	*Tartar lichen.*	... ...	... ...	Pearl-ash, masts, *matches*, deal boxes, *amadŏu tinder*.		**Scandinavia**	12	... ...	... ...	Skins, *down*, *whalebone*, *quills*, *eiderdown*.	Sharks' oil, *whale*, *seal*, and cod liver oils, *castoreum* of beaver.	*Dried fish*, *fresh fish* exported in borax (*turbot*, *lobster*, herring), *salmon*.	12
Pitch, turpentine.	Beechnut, **walnut**, and linseed.	13	*Timber*—pine, fir, beech, &c.	... ...	... ...	Hemp.	Cotton weaving.	Artistic *wood-carvings* and *toys*, charcoal, potash.		**Switzerland**	13	Silk-weaving, *lace*.	... ...	*Chamois' horns* and *leather*.	... ...	*Gruyère cheese*, butter, *honey*.	13
... ...	... ...	1	*Fine pines* (Columbia).	... ...	... ...	... ...	... ...	... ...	AMERICA.	**British** N.W. Territory (*a*) Manitoba (*b*) Columbia (*c*)	1	Trapping, hunting (*a*).	... ...	*Furs* (silver-fox, wolf, beaver, bear, otter, moosedeer, reindeer) (*a*).	*Castoreum*, seal and whale oils.	*Wild fowls* (duck, goose, eider, &c.) (*a*), sheep, cattle (*b*).	1
Canada balsam.	Myrtle or candleberry wax.	2	Pine, *bird's eye maple*, beech, larch, oak, *pencil cedar*, *black walnut*, *wood*.	... ...	... ...	Hemp.	Hemp.	Timber and lumber trade, shipbuilding, potash, pearl-ash.		**Canada** and **Hudson's Territory**	2	Trapping, hunting.	... ...	*Furs* (squirrel, fox, beaver, raccoon, marten, seal), *down* and *feathers* (turkey, goose, swan, &c.).	*Seal* and *whale* oils, + *castoreum*, *wax*.	*Honey*, *cod*, *salmon*, *mackerel*, herring, beef, cattle, *pork*, *cheese*, butter.	2
... ...	... ...	3	... ...	... ...	... ...	... ...	... ...	... ...		**Alaska** (*a*) and **Greenland** (*b*)	3	... ...	... ...	*Furs* (seal, fox, reindeer), *eiderdown* and *antlers* (G),—sea-otter, fox, reindeer, seal (A).	Seal and whale oils.	Dried fish (Alaska).	3
Tar, *turpentine*.	*Thyme*, *peppermint*.	4	*Timber* (*bird's eye maple*, *pencil cedar*, *black walnut*), Wellingtonia (sequoia).	... ...	*Quercitron* and indigo (South).	*Cotton herb*, hemp.	*Cotton fabrics.*	Timber trade, shipbuilding, huge fruit nurseries, *potash*, *pearl-ash*.		**United States**	4	Meat preparing and tinning (Chicago), fishing for *pearls* (California).	*Wool.*	*Hides*, furs, down, *pearls* (California.	*Castoreum* of beaver, seal and whale oils, *wax*, *ambergris* of sperm whale.	Pork, *bacon*, *beef*, *salt pork*, fish, *cheese*, *honey*, *oysters*, *tinned provisions* (beef, salmon, lobster), *ham*, *lard*, butter.	4
... ...	Cacao butter.	5	*Mahogany.*	... ...	Log-wood, *indigo-wood*.	Cotton tree, pita flax.	Paper.	... ...		**Mexico**	5	... ...	*Cochineal* + (of coccus cacti).	Hides.	... ..	Cattle.	5
Gums, *india-rubber*, balsams.	Cacao butter.	6	*Fine timber* (lignum vitæ, *American cedar*, *mahogany*).	... ...	*Log-wood*, *Nicaragua peach-wood*, *indigo-wood*.	*Carloduvica palmata*, cotton tree, pita flax.	*Panama hats.*	*Panama hats*, Coquilla nut (ivory).		**Central America**	6	... ..	*Cochineal.*	*Turtle-shell.*	... ...	*Turtles.*	6
Pitch of Trinidad, aloes.	Cacao butter (Trinidad), castor and *croton* oils.	7	*Mahogany*, *lignum vitæ*, *lance-wood*, *snake-wood*, *American cedar*, *satin-wood*.	... ...	*Log-wood*, *indigo-wood*, *arnotto*, *fustic*.	*Cotton tree*, *cotton shrub*.	... ...	*Cigars* (Havana), tobacco, crabs' eyes, *Balsa* cork.		**Antilles**, or **West India Islands**	7	*Pearl* fishery.	*Cochineal.*	*Turtle-shell*, feathers, *pearls*.	*Ambergris*, *turtle eggs' oil*, *wax*.	*Turtles*, *honey*.	7
... ...	Cacao butter, carapa oil or butter.	8	*Fine snake*) and *lance wood*, *satin wood*, &c.	... ...	Indigo.	Cotton tree, pita flax.	... ...	Tonquin bean for snuff.		**Guiana**	8	... ...	... ...	*Feathers.*	... ...	... ...	8
Gums, resins, *india-rubber*.	Cacao butter.	9	*Ebony*, *Brazil-wood*, mahogany, snake-wood, satin-wood.	*Divi-divi.*	*Indigo*, *Brazil-wood*.	Carloduvica palmata, cotton shrub, pita flax.	*Panama hats.*	Balsa, *Coquilla nut*, *Panama hats*.		**Venezuela** (*a*), **Columbia** (*b*), and **Ecuador** (*c*)	9	*Pearl* fishery.	... ...	Hides, *tortoise-shell* (Galapagos).	... ...	Cattle, sheep, *tortoises*.	9
Gums, resins, *gum copal* or *copal balsam*, caoutchouc.	... ...	10	... ...	... ...	Brazil-wood, *Nicaragua peach-wood*, Braziletto-wood (*a*).	Carloduvica palmata, pita flax.	Panama hats.	... ...		**Peru** (*a*) and **Bolivia** (*b*)	10	.. ...	*Wool* of sheep, and of *guanaco*, *llama*, *alpaca*, &c.	*Fur* of chinchilla.	... ...	... ...	10
Caoutchouc, gums.	Cacao butter, wax of carnahuba palm, palm oil.	11	*Snake-wood*, *rose-wood*, Brazil-wood, *satin-wood*, carnahuba palm.	... ...	*Brazil-wood*, *arnotto*, *log-wood*, *indigo-wood*, Braziletto-wood.	Cotton tree (North), pita flax, hemp (South).	... ...	Corozo and Coquilla nuts (*vegetable ivory* for turners).		**Brazil**	11	Meat tinning (South).	... ...	*Feathers* of Rhea, toucan, parrots, humming-birds; *hides*, *horns*.	*Tallow*, *ambergris*.	*Jerked beef.*	11
... ...	... ...	12	Timber (*b*).	... ...	... ...	Cotton (*b*).	... ...	... ...		**La Plata** Argentine (*a*) Para-Uruguay (*b*)	12	Meat tinning and meat extract.	*Wool*, hair (horse, goat) (*a*).	*Hides*, *horns* (*a*, *b*),—*skins*, *hoofs*, *bones*, *horse-hair* (*a*).	*Tallow* (*a*, *b*).	*Cattle*, sheep, *beef extract* (*a*, *b*),—*salted beef* (*a*).	12
Pitch, turpentine.	... ...	13	... ...	... ...	... ...	Hemp (Chili).	Hempen cloths (Chili).	Charcoal (Chili).		**Chili** (*a*) and **Patagonia**, **Falkland** (*b*)	13	*Leather* (Chili).	*Wool* (Chili).	*Hides* (Chili).	Tallow (Chili),—seal oil (Patagonia).	*Seals*, *penguins*, and other aquatic birds (Patagonia and Falkland).	13

AMERICA.	**British** N.W. Territory (a) Manitoba (b) Columbia (c)	1	*Coal* (a),—copper, iron, marble, plumbago, *coal*, and *gold* (c).	... ...
	Canada and **Hudson's Territory**	2	*Iron, coal, copper, gypsum, petroleum, plumbago*, slates, labradorite, serpentine-marble, manganese, heavy spar or baryte, lignite, basalt, silver, gold, lead, tin, lithographic stones, *marbles*, greenstone, *salt*.	Soap, iron-castings, hardware, cutlery.
	Alaska (a) and **Greenland** (b)	3	Cryolite (fluoride of aluminium), *graphite*, asbestos (b).	... ...
	United States	4	*Coal* and *iron* (Pittsburg, &c.), *copper, gold, petroleum*, sandstones, baryte, *marbles, lead, salt, mercury*, chromium, silver, zinc, Epsom salt, beryl, jet, serpentine, basalt, bergmahl, *talc*, graphite, *jade, alum, kaolin*, nitre, fluor spar, dolomite.—Sulphur springs.	*Iron* work, castings, glass work, pottery, brickwork, soap, *mineral oils* purified.
	Mexico	5	*Silver, gold, mercury, carbonate of soda* (for smelting silver ores), copper, iron, lead, topaz, *obsidian*, asphalt, *jade, natron*, graphite.	*Earthen* and *stoneware*, glass, gold and silver lace, silver ores smelting.
	Central America	6	*Silver*, gold, *obsidian*, iron, lead, mercury, marble, jasper, sulphur, salt.	... ...
	Antilles, or **West India Islands**	7	*Sulphur* (Guadeloupe and Martinique), *petroleum* (Barbadoes), *asphalt* (Trinidad), coal, copper, and *salt* (Cuba), salt (Curaçao), platinum (St. Domingo), *phosphatic nodules* (Sombrero).	... ...
	Guiana	8	Fine kaolin clay for pottery, agates, rock crystal, edible infusorial clay.	... ...
	Venezuela (a), **Columbia** (b), and **Ecuador** (c)	9	Copper, coal, salt, asphalt, carbonate of soda, petroleum (a),—silver, emerald, gold, salt, nitrate of soda, copper, platinum, lead, iron (b).	Pottery (Ecuador).
	Peru (a) and **Bolivia** (b)	10	*Silver, gold, guano, nitrates*, saltpetre, *mercury*, copper, salt, sulphur, tin, platinum, *borax*, asphalt, obsidian, *cubic nitre* (a),—*silver, nitre beds, diamonds*, gold, mercury, borax, tin, copper, lead, iron, emerald (b).	... ...
	Brazil	11	*Diamonds, gold, emerald, ruby, topaz, beryl*, garnet, amethyst, copper, *iron, salt*, silver, platinum, *saltpetre*, palladium, chromium.	*Diamond* and *precious stone cutting*.
	La Plata Argentine (a) Para - Uruguay (b)	12	*Silver*, gold, nickel, copper, tin, lead, iron, coal in North-West (a),—carbonate of soda (b).	... ...
	Chili (a) and **Patagonia, Falkland** (b)	13	*Silver, copper, coal*, gold, platinum, borax, cubic nitre, *Epsom salt, saltpetre, nitrate of soda* (a).	*Earthenware jars* (Chili), copperware, soap.
AFRICA.	**South** Cape, Natal, Orange (a) Transvaal, Griqualand, &c. (b)	1	*Copper*, gold, diamonds, graphite (a),—*gold, diamonds*, copper (b).	... ...
	Centre Nigritia (a) Sahara (b)	2	*Sulphur* mountains (a),—*gold dust, natron, salt* blocks (b).	... ...
	North Marocco, Algeria (a) Tunis, Tripoli (b)	3	*Iron, silver*, lead, copper, zinc, antimony, cinnabar, *salt* hills, heavy spar or *baryte* (a),—infusorial earth or *Tripoli powder* (b),—*natron* (South).	*Pottery*, gunpowder, hardware, *firearms*, jewellery, *gold work* (a),—soap, *pottery* (b).
	Nile Basin Egypt, Soudan (a) Abyssinia (b)	4	*Syenite, nummulitic limestone, sal ammoniac, soda* lakes, salt, *glauber salt*, marbles, *alabaster*, emerald, ruby, *natron, nitre* (a),—*block salt*, silver, emerald (b).	Firearms, *porous water jars, spears*, gunpowder (a),—*black pottery, sword blades*, cutlery, axes, *spears* (b).
	East Somali, Gallas, Socotra (a) Zanzibar, Mozambique (b)	5	*Coal*, gold dust, *gum copal* (b).	Pottery (Zanzibar).
	West Benguela, Angola, Lower Guinea (a) Upper Guinea, Liberia, Senegambia (b)	6	*Iron*, copper, *gum copal*, sulphur mines (a),—*gold dust* (b).	Wrought iron (Dahomey),—Sword blades, *gold working* (Ashantee).
	Western Isles Madeiras (a) Canaries (b)	7	... ...	... ...
	Eastern Isles Madagascar, Comoro (a) Mauritius, Mascarenes (b)	8	Iron, copper, coal, silver, amber (Madagascar),—gold (Mauritius).	Jewellery, cutlery, silver and gold working (Madagascar).
ASIA.	**India** (with Ceylon)	1	*Gold* (Mysore),—*salt* (Punjaub),—*coal, saltpetre, topaz, beryl, opal*, amethyst, copper, soda (India),—graphite and *diamonds, ruby, sapphire, cat's-eye*, platinum, *mercury, salt* (Ceylon).	Brasswork, diamond cutting, *jewellery, swords*, matchlocks, *filagree work*.
	Iran Plateau Afghanistan	2	*Iron, lapis lazuli, sapphire*, ruby, gold, copper, rock salt.	*Swords* and matchlocks.
	Persia	3	*Turquoise, sal ammoniac, naphtha*, amethyst, ruby, lapislazuli, amber, sulphur, saltpetre, borax, copper, lead, marbles, *salt*.	Daggers, cutlery, *swords*, glass, pottery, copperware, *gold brocade*, firearms.
	Arabia	4	Turquoise, ironstone, saltpetre.	Glazed earthen jars, gunpowder, *arms*, and *cutlery*.
	Asiatic Turkey Asia-Minor and Mesopotamia	5	*Salt, copper, petroleum, amber, bitumen, asphalt*, coal, ironstone, silver, soda; white, green, and black marbles, hones, alum, *jet, meerschaum*, asphalt (Dead Sea).	*Gold* and *silver embroidery, swords*, and *cutlery* (Asia Minor).
	Asiatic Russia Siberia and Kamtschatka (a) West Turkestan and Caucasus (b)	6	*Diamonds, gold, salt, silver*, iron, copper, *malachite, asbestos, talc, graphite*, lead, glauber salt, marbles, sulphur springs, jasper, ruby, emerald, beryl, topaz, amethyst, *mica plates* (a),—*salt, lapis lazuli*, ruby, sapphire, *asphalt, naphtha* (b).	Precious stones and jasper work (Bokhara, in West Turkestan),—swords (Caucasus).
	Chinese Empire China, Corea, Manchooria (a) Mongolia, Thibet, East Turkestan (b)	7	*Gold, silver, lead, mercury, tin*, zinc, *salt, coal, kaolin, jade*, amber, *ruby, alum, sapphire*, topaz, lapis lazuli, white copper (pe-tung), amethyst, opal, malachite, steatite (a),—*gold*, silver, gems (agate), mercury (b),—borax (Thibet).	*Jade ornaments, porcelain, gongs, stone engravings* (a).
	Indo-China Tonquin, Anam, Upper Cochin, Burmah, Pegu (a) Lower Cochin, Siam, Cambodia, Malacca, Straits Settlements (b)	8	*Petroleum, naphtha, ruby, sapphire, gold, copper, lead, iron*, coal, amber, jade, silver (a),—*tin, gold, silver*, and many other metals very abundant (b).	Unglazed earthenware, *filagree work*, cutlery, *swords, spears*, carpenter's tools (a and b).
	Japan (a), with **Kuriles** (b)	9	*Gold, mercury, copper, iron, coal*, mineral-pitch, amber, asphalt, *kaolin* (a),—*copper*, silver (b).	*Glass, porcelain*, iron work, steel work, *optical instruments*, clocks (a).
	Malaysia, or **E. Indies** Sundas (a) Moluccas and Philippines (b)	10	*Tin* (Banca),—*diamonds*, platinum, gold (Borneo),—*rich coal* at Labuan (Borneo),—*saltpetre*, sulphur (Java),—besides *iron, sulphur*, gold dust + opal, jasper, chalcedony, carnelian, onyx, agate, amethyst (viz., siliceous gems) + *borax, pumice, saltpetre*, and *antimony* (a),—amber in Philippines.	... ...
AUSTRALASIA.	**West** (a) and **South** (b) **Australia**	1	*Copper, coal*, lead (a),—*copper, gold, lead, iron*, silver, bismuth (b).	Various iron goods (b).
	Queensland	2	*Gold*, copper, coal, tin, iron, mercury.	... ...
	New South Wales (a) and **Victoria** (b)	3	*Gold, coal*, copper, silver, lead, tin, iron, mercury, salt (a),—*gold* (b).	Copper smelting (a).
	Tasmania (a) and **New Zealand** (b)	4	*Iron, copper*, coal, tin (a),—*coal, petroleum, gold*, silver, iron, *copper*, tin, manganese, lignite, *jade*, sulphur (b).	Soap manufacture (a).
OCEANIA.	**Melanesia** (Islands north of Australia)	1	... ...	... ...
	Micronesia (Islands north of Papua)	2	... ...	... ...
	Polynesia (Isles of C. Pacific)	3	Sal ammoniac, glauber salt (Sandwich Isles).	... ...

AMERICA.	**British** N.W. Territory (a) Manitoba (b) Columbia (c)	1	*Corn* (chiefly barley) (b).	... ...	... ...	... ...	... ...	... ...	1	*Fine pines* (Columbia).	... ...	... ...
	Canada and **Hudson's Territory**	2	*Wheat, barley, flour*, oats, *maple sugar, peas, beans, lentils*.	Beer, whiskey, &c.	... ...	... ...	*Canada balsam*.	Myrtle or candleberry wax.	2	Pine, *bird's eye maple*, beech, larch, oak, *pencil cedar, black walnut, wood*.	... ...	... ...
	Alaska (a) and **Greenland** (b)	3	... ...	... ...	... ...	... ...	... ...	... ...	3	... ...	... ...	... ...
	United States	4	*Wheat, flour, rice, ground nut*, arrowroot of zamia, *maize*, barley, *millet, sugar-cane, hickory nut*, + *fine grape, orange*, pear, &c., in Far West.	*Beer* (chiefly *Lager*), whiskey, and various other drinks.	... ...	*Tobacco* (Virginia, Maryland).	*Tar, turpentine*.	*Thyme, peppermint*.	4	*Timber* (*bird's eye maple, pencil cedar, black walnut*), Wellingtonia (sequoia).	... ...	*Quercitron* and indi
	Mexico	5	*Maize*, millet, *sugar, wheat*, batata, grenadilla, jambose, pineapple, banana, cassava, *yam*, mango, custard apple, guava, *tamarind*, plantain, grape, arrowroot, tapioca, avocado pear.	Coffee, *cacao*, agave (intoxicating octli).	*Vanilla, capsicum*.	*Jalap, cashew-nut, sarsaparilla*, tobacco.	... ...	Cacao butter.	5	*Mahogany*.	... ...	*Log-wood, indigo-*
	Central America	6	*Rice*, maize, *arrowroot*, tapioca, batata, pineapple, sugar-cane, + most of the fruits of South Mexico.	Coffee, *cacao*, agave (intoxicating octli).	*Vanilla*.	*Sarsaparilla*.	Gums, *india-rubber*, balsams.	Cacao butter.	6	*Fine timber* (lignum vitæ, *American cedar, mahogany*).	... ...	*Log-wood, Nicara- wood, indigo-woo*
	Antilles, or **West India Islands**	7	*Sugar, molasses, pineapple, banana, wheat, arrowroot*, tapioca (manioc), orange, batata, plantain, rice, yam, *tamarind*, pomegranate, lemon, *millet, plantain*, mango, *guava*, + other fruits of Mexico.	*Cacao*, coffee, *rum*.	*Pepper, ginger*, cassia, cloves, capsicum, *pimento* (allspice), mace, chillies.	*Tobacco, sarsaparilla, aloes* (Barbadoes), castor oil, *croton oil, cascarilla bark*.	*Pitch* of Trinidad, aloes.	Cacao butter (Trinidad), castor and *croton* oils.	7	*Mahogany, lignum vitæ, lance-wood, snake-wood, American cedar, satin-wood*.	... ...	*Log-wood, indig- notto, fustic*.
	Guiana	8	*Sugar-cane, molasses, yam*, cassava, arrowroot, tapioca, rice, maize, + most fruits of Mexico.	Agave (intoxicating octli), *rum*, coffee, *cacao*, assai (cooling beverage of a palm).	*Cayenne, vanilla, cloves*, cinnamon.	Tobacco, *Tonquin bean*.	... ...	Cacao butter, carapa oil or butter.	8	*Fine snake* and *lance wood, satin wood*, &c.	... ...	Indigo.
	Venezuela (a), **Columbia** (b), and **Ecuador** (c)	9	*Sugar-cane, plantain, arrowroot, tapioca*, batata, maize, *yam*, rice, + most fruits of Mexico.	*Cacao*, coffee, assai, agave (intoxicating).	Cinnamon, *vanilla*.	Tobacco, *cinchona, cedron*, jalap.	Gums, resins, *india-rubber*.	Cacao butter.	9	*Ebony, Brazil-wood*, mahogany, snake-wood, satin-wood.	*Divi-divi*.	*Indigo, Brazil-woo*
	Peru (a) and **Bolivia** (b)	10	*Arrowroot, tapioca, batata*, rice, maize, guava, *and most tropical fruits* (plantain, banana, &c. &c.; see Mexico).	Assai beverage, agave (intoxicating drink from Agave Americana).	*Vanilla* (a).	*Cinchona bark, coca leaf*, tobacco, sarsaparilla, *ipecacuanha*, jalap.	Gums, resins, *gum copal* or *copal balsam*, caoutchouc.	... ...	10	... ...	... ...	Brazil-wood, *Nicar- wood*, Braziletto-
	Brazil	11	*Sugar-cane, rice, arrowroot, tapioca, wheat, sago, Brazil nut*, banana, olive, grape, maize, pineapple, tamarind, yam, and most of the fruits of Mexico.	Agave (intoxicating), guarana tea, *coffee, cacao*, assai (nourishing and cooling drink from Euterpe Oleracea).	*Vanilla*.	Cinchona, *tobacco, ipecacuanha, sarsaparilla*.	*Caoutchouc*, gums.	Cacao butter, wax of carnahuba palm, palm oil.	11	*Snake-wood, rose-wood*, Brazil-wood, *satin-wood*, carnahuba palm.	... ...	*Brazil-wood, arnot- indigo wood*, wood.
	La Plata Argentine (a) Para - Uruguay (b)	12	*Algaroba bean, wheat*, oats (a),—sugar-cane (b),—and most European fruits (a, b).	Chica from algaroba bean, *yerba maté* tea (a, b).	... ...	Tobacco (b).	... ...	... ...	12	Timber (b).	... ...	... ...
	Chili (a) and **Patagonia, Falkland** (b)	13	*Wheat*, maize, *flour*, oats, *European fruits* (fig, orange) (Chili).	... ...	... ...	... ...	Pitch, turpentine.	... ...	13	... ...	... ...	... ...
AFRICA.	**South** Cape, Natal, Orange (a) Transvaal, Griqualand, &c. (b)	1	*Wheat, oats, maize*, grape, cane sugar, + European fruits, + tropical fruits (plantain, tamarind, guava).	*Wine*, coffee.	... ...	*Aloes*, tobacco (a), *bhang*, or smoking hemp of Bushmen.	*Aloes* (a).	... ...	1	... ...	... ...	*Orchella-weeds* (a)
	Centre Nigritia (a) Sahara (b)	2	*Date*, maize (b).	Palm wine (a).	... ...	... ...	... ...	... ...	2	*Ebony, rose-wood* (a), *African teak* (b).	... ...	... ...
	North Marocco, Algeria (a) Tunis, Tripoli (b)	3	*Date, olive, wheat, almond*, fig, rice, barley, *millet, orange*, citron, sugar-cane, *pomegranate, bitter almond* (a, b).	Palm wine	... ...	Linseed (a, b), tobacco (b).	Several gums, as *sandarach*, &c.	Linseed, olive (a, b).	3	*Mosque wood* or sandarach.	... ...	Saffron (Tripoli).
	Nile Basin Egypt, Soudan (a) Abyssinia (b)	4	*Rice, maize, wheat, barley*, sugar-cane, tamarind, *date, doum-palm*, millet, olive, coffee, banana, *peas, beans, lentils*.	Palm wine.	... ...	*Tobacco, senna*, myrrh, &c.	*Gum arabic* (a, b), myrrh (b).	*Sesame, linseed*, attar of roses.	4	*Ebony*, baobab (b).	... ...	*Safflower*, indigo.
	East Somali, Gallas, Socotra (a) Zanzibar, Mozambique (b)	5	*Sugar-cane, corn*, ground nut, yam (b).	*Coffee* (b).	Pepper, cloves (b).	*Myrrh, aloes* (a), *senna* (b).	*Gum arabic, frankincense, myrrh, dragon's blood gum* (a),—arabic and *copal gums, india-rubber* (b).	Ground nut (b).	5	... ...	... ...	Indigo (a).
	West Benguela, Angola, Lower Guinea (a) Upper Guinea, Liberia, Senegambia (b)	6	*Ground nut, millet, arrowroot*, coffee (a, b), *sugar-cane*, rice, yam, cacao (b), banana (a).	Palm wine.	Ginger, pepper (b).	... ...	India-rubber, copal, and arabic gums (b).	*Palm oil, shea butter*, ground nut (a, b), *vegetable tallow* (b).	6	... ...	... ...	Dye-woods (b).
	Western Isles Madeiras (a) Canaries (b)	7	*Grape* (a, b), *citron, orange*, sugar-cane (a).	*Wine* (a, b).	... ...	... ...	... ...	... ...	7	... ...	... ...	*Orchella-weeds* (b),—
	Eastern Isles Madagascar, Comoro (a) Mauritius, Mascarenes (b)	8	*Rice*, palm fruits (date, cocoa-nut) (a), *sugar, molasses* (b), chiefly Mauritius.	Traveller's drink (Madagascar), *coffee* (Mauritius).	Spices (b)—pepper, *cloves* (a, b).	Aloes (Mauritius).	... ...	*Palm oil* (*Mauritius*).	8	*Valuable teak, ebony* (a, b).	... ...	*Orchella-weeds* (M- dyes (Mauritius).
ASIA.	**India** (with Ceylon)	1	RICE, *maize, banyan fig, mango, banana, sugar-cane, wheat*, date, millet, bread-fruit, batata, *pine-apple*, melon, guava, mangosteen, shaddock, orange, *cocoa-nut* (Ceylon), jaggery (or sugar of Palmyra palm), *chickpea*.	Palm wine or taree (of Palmyra palm), *tea*, rum,—*coffee* (Ceylon).	*Long pepper, ginger, cardamom, cinnamon* of Ceylon, star anise.	OPIUM, *betelnut, tobacco*, cinchona, assafœtida, castor oil, *nux vomica, churrus* (narcotic resin of hemp), *gunyah* (smoking hemp).	*Gamboge* (Ceylon), *frankincense*, assafœtida, benzoin, dragon's-blood.	*Cocoa-nut* oil (Ceylon),—*linseed* and castor oils, *sandalwood* perfume, pinei tallow, kokum butter, galam or *Nipal butter* (purest), *epie oil* or butter, *ilpa oil* or butter.	1	*Ceylon ebony, rattan* or cane, *teak, bamboo*, banyan tree, *sandal-wood, satin-wood*, snake-wood.	*Catechu*.	Gamboge, *madde- lac-dye* (of coccus *sandal-wood, tur-* flowers, *myrobala-* blood
	Iran Plateau Afghanistan	2	*Rice, wheat*, oats; European fruits (fresh and dried).	... ...	Ginger.	*Assafœtida*.	*Assafœtida*.	Attar of roses.	2	... ...	... ...	Madder, turmeric.
	Persia	3	*Rice, grape*, pomegranate, date, sugar-cane, + *best European fruit* (peach, &c.).	Shiraz wine.	... ...	*Assafœtida, tobacco* (Shiraz), myrrh.	Myrrh, *assafœtida*.	*Attar of roses*.	3	Various.	Gall-nut.	*Safflower*, madder, *rue*, gall-nut.
	Arabia	4	*Maize, date, tamarind, samh* (reddish farinaceous seeds of Bedouins), peach, apricot, cocoa-nut, sugar-cane.	*Moka* coffee.	... ...	*Aloes, senna*, + *hashash* or narcotic hemp, myrrh, storax.	*Frankincense, myrrh*, storax, *aloes, gum arabic*.	Perfumes.	4	... ...	... ...	*Indigo*.
	Asiatic Turkey Asia - Minor and Mesopotamia	5	*Fig, raisin, wheat, barley, oat, truffle, olive, grape*, pomegranate, orange, lemon, date, *carob bean, dried grapes*, &c.	Tenedos red *wine*, coffee.	... ...	*Tobacco* (Latakia), *opium*, assafœtida, storax.	*Chian mastic, frankincense*, assafœtida, turpentine, gum arabic, storax.	Olive, sesame, aniseed, *rose*.	5	*Box-wood, cedar* of Lebanon, oak.	*Valonia bark, gall-nut*.	*Madder*
	Asiatic Russia Siberia and Kamtschatka (a) West Turkestan and Caucasus (b)	6	Rice, oats, European fruits, with *hazelnut* (b).	Koumiss (fermented mare's milk) (b).	... ...	Tobacco (Caucasus), rhubarb (Turkestan).	... ...	... ...	6	Coniferæ (a).	... ...	Indigo (Caucasus).
	Chinese Empire China, Corea, Manchooria (a) Mongolia, Thibet, East Turkestan (b)	7	*Rice*, orange, mango, banana, sago palm, *sugar-cane, soybean* (a), *barley, oats*, wheat, grape, orange, &c. (b)	*Tea* (a).	*Ginseng root, cassia, ginger, star anise* (a).	*Opium, ginseng root, rhubarb, camphor* (a).	*Gums* (a).	*Sesame, camphor* (a), vegetable tallow or wax.	7	*Bamboo, sandal-wood* (a).	... ...	*Safflower, turmeric*
	Indo-China Tonquin, Anam, Upper Cochin, Burmah, Pegu (a) Lower Cochin, Siam, Cambodia, Malacca, Straits Settlements (b)	8	*Rice, maize, sugar-cane, sugar palm, pineapple*, ground nut, pomegranate, melon, durian (a),—*rice, tapioca, sugar-cane*, maize, *sago*, pineapple, pomegranate, ground-nut, melon, durian (b).	*Tea* (a).	Cinnamon, *cardamom* (a),—*pepper*, and other spices (b).	Tobacco, *betel-nut* (a, b), *Tonquin bean* (a).	Gums, *varnish* (a), gums (*gamboge, gutta percha*), *varnish* (b).	Ground nut, *perfumed eagle-wood* (a),—ground nut (b).	8	*Finest teak*, eagle-wood (a), *teak, rose*, and *sapan woods, ebony, cane, bamboo* (b).	*Betel-nut* (a, b).	*Indigo* (a),—*turme-* indigo, *gamboge*
	Japan (a), with **Kuriles** (b)	9	*Sugar-cane, edible seaweed*, loquat, shaddock, melon, false sago, and European rosaceous fruit (a).	*Tea* (a).	*Star anise* (a).	*Camphor* (a).	Vegetable pitch, *varnish* (a).	*Camphor* (a).	9	*Beech, ash, pine, elm, maple, Japanese cedar*, bamboo (a).	... ...	... ...
	Malaysia or **E. Indies** Sundas (a) Moluccas and Philippines (b)	10	*Rice, true sago*, cassava, *maize, yam, bread fruit*, pineapple, arrowroot, tapioca, batata, millet, *wheat, papaw*, cocoa-nut, *sugar-cane, pomegranate, tamarind*, melon (a),—*rice*, sugar-cane (b).	*Coffee* (Java), tea, cacao, *rum* (a),—palm wine (of Saguerus saccharifer), coffee, cacao, *rum* (b).	*Black pepper*, cloves, cassia, vanilla, *cinnamon, ginger, aniseed*, chillies, cardamom, *mustard* (a),—*nutmeg, mace, cloves*, cassia, *cinnamon, vanilla*, chillies, *cardamom* (b).	*Camphor tree, betel-nut*, tobacco, rhubarb, benzoin, *opium*, + *nux vomica* (a),—tobacco (b).	*Gutta percha, india-rubber*, gamboge, benzoin.	*Macassar oil* (of the badean), *cocoa-nut, sesame, linseed, anise, camphor* (of tree), *castor oil*, Java tallow, gutta podah wax (a),—*cocoa-nut*, sesame (b).	10	Fine *ebony, cane, iron-wood, sapan-wood, cedar* (b), the *above timbers* + *teak* + niaouli tree (a).	*Betel-nut* (a).	*Indigo, turmeric, sapan, gamboge*
AUSTRALASIA.	**West** (a) and **South** (b) **Australia**	1	*Grape*, wheat, barley, oats, maize, South European fruits (lemon, &c.) (chiefly b), + fruit of Melanesia and Malaysia.	Wines (b).	... ...	... ...	Gum of eucalyptus.	... ...	1	100 kinds of *eucalyptus* (blue gum or fever tree), 300 kinds of leafless *acacia*;—*casuarina, banksia, sandal, black-wood*, musk-wood, *pink-wood, marsh oak, huon pine, araucaria, pandanus*, most of them valuable.	... ...	... ...
	Queensland	2	*Sugar-cane, maize*, yam, *rice, grape, arrowroot*, + mango, guava, banana, cocoa-nut, cassava, &c. (*see* Melanesia).	Coffee.	... ...	Tobacco.	Gum.	... ...	2		... ...	Indigo.
	New South Wales (a) and **Victoria** (b)	3	*Rice, grape, maize*, + fruit of South Europe, + *wheat*, and some tropical fruit.	Wine.	... ...	Tobacco (a).	Gum.	... ...	3		... ...	... ...
	Tasmania (a) and **New Zealand** (b)	4	Grape, orange, European cereals and fruits (a, b).	Hops (a).	... ...	... ...	Gum (a), copal (b).	Various *oils* (a).	4	Porcupine, and myrtle-wood, eucalyptus (a),—*puriri* (iron-wood), *kauri* (yellow pine), *rimi* (red pine), *black birch* (b).	... ...	... ...
OCEANIA.	**Melanesia** (Islands north of Australia)	1	*Cocoa* (single and double), *bread-fruit*, yam, batata, *sugar-cane*, sago, arrowroot, cassava, &c. (on the whole like Malaysia).	Coffee.	Ginger, nutmeg.	Tobacco.	*Gutta percha*.	Camphor (tree).	1	*Ebony*, teak, *niaouli* tree, &c. (on the whole like Malaysia.)	... ...	Indigo, sapan dye,
	Micronesia (Islands north of Papua)	2	*Cocoa* (single and double), *pandang, sugar-cane*, fig, rice (on the whole like Polynesia).	... ...	... ...	Tobacco.	... ...	Sandalwood perfume.	2	*Pandanus, casuarina*, sandal, &c.	... ...	Indigo.
	Polynesia (Isles of C. Pacific)	3	*Cocoa* (single and double), *bread-fruit*, maize, *sugar-cane*, rice, *banana*, orange, citron, pineapple, lime, yam, *arrowroot*, melon, *plantain*, cabbage palm.	Coffee, *milk of cow tree*.	... ...	... ...	... ...	Cocoa-nut oil, sandalwood perfume.	3	*Pandanus, casuarina*, sandal, &c.	... ...	... ...

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	... ...	... ...	... ...	... ...	1	*Fine pines* (Columbia).	... ...	... ...	... ...	... ...	... ...	AMERICA.	**British** N.W. Territory (a) Manitoba (b) Columbia (c)	1	Trapping, hunting (a).	... ...	*Furs* (silver-fox, wolf, beaver, bear, otter, moosedeer, reindeer) (a).	*Castoreum*, seal and whale oils.	*Wild fowls* (duck, goose, eider, &c.) (a), sheep, cattle (b).	1
	... ...	... ...	*Canada balsam.*	Myrtle or candleberry wax.	2	Pine, *bird's eye maple*, beech, larch, oak, *pencil cedar*, *black walnut*, wood.	... ...	... ...	Hemp.	Hemp.	Timber and lumber trade, shipbuilding, potash, pearl-ash.		**Canada** and **Hudson's Territory**	2	Trapping, hunting.	... ...	*Furs* (squirrel, fox, beaver, raccoon, marten, seal), *down* and *feathers* (turkey, goose, swan, &c.).	*Seal* and *whale* oils, + *castoreum*, *wax*.	*Honey*, *cod*, *salmon*, *mackerel*, herring, beef, cattle, *pork*, *cheese*, butter.	2
	... ...	... ...	... ...	... ...	3	... ...	... ...	... ...	... ...	... ...	... ...		**Alaska** (a) and **Greenland** (b)	3	... ...	... ...	*Furs* (seal, fox, reindeer), *eider-down* and *antlers* (G),—sea-otter, fox, reindeer, seal (A).	Seal and whale oils.	Dried fish (Alaska).	3
skey, s.	... ...	*Tobacco* (Virginia, Maryland).	*Tar*, *turpentine*.	*Thyme*, *peppermint*.	4	*Timber* (*bird's eye maple*, *pencil cedar*, *black walnut*), Wellingtonia (sequoia).	... ...	*Quercitron* and indigo (South).	*Cotton herb*, hemp.	*Cotton fabrics.*	Timber trade, shipbuilding, huge fruit nurseries, *potash*, *pearl-ash*.		**United States** . .	4	Meat preparing and tinning (Chicago), fishing for *pearls* (California).	*Wool.*	*Hides*, furs, down, *pearls* (California.	*Castoreum* of beaver, seal and whale oils, *wax*, *ambergris* of sperm whale.	Pork, *bacon*, *beef*, *salt pork*, *fish*, *cheese*, *honey*, *oysters*, *tinned provisions* (beef, salmon, lobster), *ham*, *lard*, butter.	4
toxi-	*Vanilla*, *capsicum*.	*Jalap*, *cashew-nut*, *sarsaparilla*, tobacco.	... ...	Cacao butter.	5	*Mahogany.*	... ...	Log-wood, *indigo-wood*.	Cotton tree, pita flax.	Paper.	... ...		**Mexico** . . .	5	... ...	*Cochineal* + (of coccus cacti).	Hides.	... ...	Cattle.	5
toxi-	*Vanilla.*	*Sarsaparilla.*	Gums, *india-rubber*, balsams.	Cacao butter.	6	*Fine timber* (lignum vitæ, *American cedar*, *mahogany*).	... ...	*Log-wood*, *Nicaragua peach-wood*, *indigo-wood*.	*Carloduvica palmata*, cotton tree, pita flax.	*Panama hats.*	*Panama hats*, Coquilla nut (ivory).		**Central America** .	6	... ...	*Cochineal.*	*Turtle-shell.*	... ...	*Turtles.*	6
	Pepper, *ginger*, cassia, cloves, capsicum, *pimento* (allspice), mace, chillies.	*Tobacco*, *sarsaparilla*, *aloes* (Barbadoes), castor oil, *croton oil*, *cascarilla bark*.	*Pitch* of Trinidad, aloes.	Cacao butter (Trinidad), castor and *croton* oils.	7	*Mahogany*, *lignum vitæ*, *lance-wood*, *snake-wood*, *American cedar*, *satin-wood*.	... ...	*Log-wood*, *indigo-wood*, *arnotto*, *fustic*.	*Cotton tree*, *cotton shrub*.	... ...	*Cigars* (Havana), tobacco, crabs' eyes, *Balsa* cork.		**Antilles**, or **West India Islands**	7	*Pearl* fishery.	*Cochineal.*	*Turtle-shell*, feathers, *pearls*.	*Ambergris*, *turtle eggs oil*, *wax*.	*Turtles*, *honey*.	7
crli), assai f a	*Cayenne*, *vanilla*, *cloves*, cinnamon.	Tobacco, *Tonquin bean*.	... ...	Cacao butter, carapa oil or butter.	8	*Fine snake* and *lance wood*, *satin wood*, &c.	... ...	Indigo.	Cotton tree, pita flax.	... ...	Tonquin bean for snuff.		**Guiana** . . .	8	... ...	... ...	*Feathers.*	... ...	... ...	8
e (in-	Cinnamon, *vanilla*.	Tobacco, *cinchona*, *cedron*, jalap.	Gums, resins, *india-rubber*.	Cacao butter.	9	*Ebony*, *Brazil-wood*, mahogany, snake-wood, satin-wood.	*Divi-divi.*	*Indigo*, *Brazil-wood*.	Carloduvica palmata, cotton shrub, pita flax.	*Panama hats.*	Balsa, *Coquilla nut*, *Panama hats*.		**Venezuela** (a), **Columbia** (b), and **Ecuador** (c)	9	*Pearl* fishery.	... ...	Hides, *tortoise-shell* (Galapagos).	... ...	Cattle, sheep, *tortoises*.	9
toxi- gave	*Vanilla* (a).	*Cinchona bark*, *coca leaf*, tobacco, sarsaparilla, *ipecacuanha*, jalap.	Gums, resins, *gum copal* or *copal balsam*, caoutchouc.	... ...	10	... ...	... ...	Brazil-wood, *Nicaragua peach-wood*, Braziletto-wood (a).	Carloduvica palmata, pita flax.	Panama hats.	... ...		**Peru** (a) and **Bolivia** (b)	10	... ...	*Wool* of sheep, and of *guanaco*, *llama*, *alpaca*, &c.	*Fur* of chinchilla.	... ...	... ...	10
guar- assai drink	*Vanilla.*	Cinchona, *tobacco*, *ipecacuanha*, *sarsaparilla*.	*Caoutchouc*, gums.	Cacao butter, wax of carnahuba palm, palm oil.	11	*Snake-wood*, *rose-wood*, Brazil-wood, *satin-wood*, carnahuba palm.	... ...	*Brazil-wood*, *arnotto*, *log-wood*, *indigo-wood*, Brazilletto-wood.	Cotton tree (North), pita flax, hemp (South).	... ...	Corozo and Coquilla nuts (*vegetable ivory* for turners).		**Brazil**	11	Meat tinning (South).	... ...	*Feathers* of Rhea, toucan, parrots, humming-birds; *hides*, *horns*.	*Tallow*, *ambergris*.	*Jerked beef.*	11
ean,	... ...	Tobacco (b).	... ...	... ...	12	Timber (b).	... ...	... ...	Cotton (b).	... ...	... ...		**La Plata** Argentine (a) Para-Uruguay (b)	12	Meat tinning and meat extract.	*Wool*, hair (horse, goat) (a).	*Hides*, *horns* (a, b),—*skins*, *hoofs*, *bones*, *horse-hair* (a).	*Tallow* (a, b).	*Cattle*, sheep, *beef extract* (a, b),—*salted beef* (a).	12
	... ...	... ...	Pitch, turpentine.	... ...	13	... ...	... ...	... ...	Hemp (Chili).	Hempen cloths (Chili).	Charcoal (Chili).		**Chili** (a) and **Patagonia**, **Falkland** (b)	13	*Leather* (Chili).	*Wool* (Chili).	*Hides* (Chili).	Tallow (Chili),—seal oil (Patagonia).	*Seals*, *penguins*, and other aquatic birds (Patagonia and Falkland).	13
	... ...	*Aloes*, tobacco (a), *bhang*, or smoking hemp of Bushmen.	*Aloes* (a).	... ...	1	... ...	... ...	*Orchella weeds* (a).	*Hemp*, *flax*, cotton.	... ...	... ...	AFRICA.	**South** Cape, Natal, Orange (a) Transvaal, Griqualand, &c. (b)	1	... ...	*Wool* (a).	*Ostrich feathers*, *tusks* (a, b),—*hides*, *skins*, *horns* (a).	... ...	*Sheep*, *cattle* (a, b).	1
	... ...	... ...	... ...	... ...	2	*Ebony*, *rose-wood* (a), *African teak* (b).	... ...	... ...	Palm fibres (a).	Blue cloths in Houssah (a).	... ...		**Centre** Nigritia (a) Sahara (b)	2	... ...	... ...	*Ivory* (a),—*ostrich feathers* (a, b)	... ...	... ...	2
	... ...	Linseed (a, b), tobacco (b).	Several gums, as *sandarach*, &c.	Linseed, olive (a, b).	3	*Mosque wood* or sandarach.	... ...	Saffron (Tripoli).	*Cotton* shrub, vegetable hair of dwarf palm.	... ...	*Cork*, from cork-oak.		**North** Marocco, Algeria (a) Tunis, Tripoli (b)	3	*Morocco leather* (Morocco and Tunis), + *fez caps*, *sponge*, and *coral* fisheries (a, b), woollen goods, *burnous*, silk goods (Tunis).	Fine *wool* in all,—silk (Tripoli).	*Goat skins*, *ivory*, *coral*, *sponges*, ostrich feathers.	*Wax*, *civet perfume*.	Cattle (Tunis),—*honey* (a, b).	3
	... ...	*Tobacco*, *senna*, myrrh, &c.	*Gum arabic* (a, b), myrrh (b).	*Sesame*, *linseed*, attar of roses.	4	*Ebony*, baobab (b).	... ...	*Safflower*, indigo.	*Cotton* shrub and tree, *flax*.	Striped cloths, *cotton mills*.	... ...		**Nile Basin** Egypt, Soudan (a) Abyssinia (b)	4	Leather, *pearl* and *coral fisheries* (a, b).	... ...	*Hides* of crocodile and hippopotamus, ostrich feathers, *ivory*, *pearls* (from off Massowah), *coral*.	*Wax.*	... ...	4
	Pepper, cloves (b).	*Myrrh*, *aloes* (a), *senna* (b).	*Gum arabic*, *frankincense*, *myyrh*, *dragon's blood gum* (a),—arabic and *copal gums*, *india-rubber* (b).	Ground nut (b).	5	... ...	... ...	Indigo (b).	*Cotton* shrub and *tree* (a).	Cotton goods (b).	... ...		**East** Somali, Gallas, Socotra (a) Zanzibar, Mozambique (b)	5	... ...	... ...	Ostrich feathers, ivory (a),—hides, ivory (b).	Civet perfume (a),—wax (b).	Fat-tailed sheep (a).	5
	Ginger, pepper (b).	... ...	India-rubber, copal, and arabic gums (b).	*Palm oil*, *shea butter*, ground nut (a, b), *vegetable tallow* (b).	6	... ...	... ...	Dye-woods (b).	*Cotton tree* (a, b).	... ...	... ...		**West** Benguela, Angola, Lower Guinea (a) Upper Guinea, Liberia, Senegambia (b)	6	*Ivory*, hides, tortoise-shell (b),—*ivory*, ostrich feathers (a).	... ...	... ...	Wax (b)	... ...	6
	... ...	... ...	... ...	... ...	7	... ...	... ...	*Orchella weeds* (b),—*indigo* (a).	... ...	... ...	Barilla (b).		**Western Isles** Madeiras (a) Canaries (b)	7	... ...	Silk, *cochineal*.	*Turtle-shell.*	... ...	Cattle (a),—*turtles* (b).	7
gas-	Spices (b)—pepper, *cloves* (a, b).	Aloes (Mauritius).	... ...	*Palm oil* (*Mauritius*).	8	*Valuable teak*, *ebony* (a, b).	... ...	*Orchella weeds* (Madagascar), dyes (Mauritius).	Palm fibres (a).	Cloth of palm fibres (a).	... ...		**Eastern Isles** Madagascar, Comoro (a) Mauritius, Mascarenes (b)	8	... ...	... ...	*Ostrich feathers*, ivory (Mauritius), *turtle-shell* (Mascarenes).	*Ambergris* (Madagascar).	*Turtles* (Mascarenes).	8
Pal- ffee	*Long pepper*, *ginger*, *cardamom*, *cinnamon* of Ceylon, star anise.	OPIUM, *betelnut*, *tobacco*, cinchona, assafœtida, castor oil, *nux vomica*, *churrus* (narcotic resin of hemp), *gunyah* (smoking hemp).	*Gamboge* (Ceylon), *frankincense*, assafœtida, benzoin, dragon's-blood.	*Cocoa-nut* oil (Ceylon),—*linseed* and castor oils, *sandalwood* perfume, pinei tallow, kokum butter, galam or *Nipal butter* (purest), *epie oil* or butter, *ilpa oil* or butter.	1	*Ceylon ebony*, *rattan* or cane, *teak*, *bamboo*, banyan tree, *sandal-wood*, *satin-wood*, snake-wood.	*Catechu.*	Gamboge, *madder*, *indigo*, *lac dye* (of coccus lacca), *red sanderswood*, *turmeric*, safflower, *myrobalans*, dragon's blood.	*Cotton herb*, *shrub*, and *tree*, *jute* (for gunny bags), *flax*, *hemp*, cocoa-nut fibre or *coir*.	*Muslins* of Dacca, pattern-coloured *kalicot*, *gunny bags* of jute, cotton cloths.	Rattan or *cane* goods, *bamboo* fabrics, *cigars* (Trichinopoly).	ASIA.	**India** (with Ceylon) .	1	*Silk* fabrics and *carpets* (Mooltan), *pearl-fishery* (Ceylon), *shawls* (Kashmir), *gold brocade* (Delhi).	*Silk*, *Kashmir goat wool*, *lac dye* + (of Coccus lacca).	*Tusks* of elephant, *pearls* (Ceylon), *antlers*, hides of gavial, buffalo, elephant, and rhinoceros, *feathers*, *skins of tiger*, deer, &c., horns of rhinoceros.	Civet perfume, *wax*, *ambergris*.	*Honey.*	1
	Ginger.	*Assafœtida.*	*Assafœtida.*	Attar of roses.	2	... ...	... ...	Madder, turmeric.	... ...	Cotton stuffs.	... ...		**Iran Plateau** Afghanistan	2	Coarse woollen stuffs, *felt* for tents.	*Wool*, goat and camel's hair.	Various furs.	... ...	Sheep.	2
	... ...	*Assafœtida*, *tobacco* (Shiraz), myrrh.	Myrrh, *assafœtida*.	*Attar of roses.*	3	Various.	Gall-nut.	*Safflower*, madder, *yellow berries*, gall-nut.	Cotton.	Cotton stuffs.	Reed pens.		Persia . .	3	*Shawls*, fine *woollen stuffs*, *hand-made carpets*, silk stuffs, *leather*, *pearl* and *coral* fishery.	*Silk*, *wool*, goat's hair.	Skins, *pearls* of Persian Gulf, *coral*.	*Musk* of musk deer, *ambergris* of sperm whale.	Sheep.	3
	... ...	*Aloes*, *senna*, + *hashash* or narcotic hemp, myrrh, storax.	*Frankincense*, *myrrh*, storax, *aloes*, *gum arabic*.	Perfumes.	4	... ...	... ...	*Indigo.*	*Cotton.*	... ...	Reed pens.		**Arabia** . . .	4	*Turbans*, *coral fishing*.	*Camel* and *goat's hair*.	*Coral.*	*Civet* perfume.	Sheep.	4
	... ...	*Tobacco* (Latakia), *opium*, assafœtida, storax.	*Chian mastic*, *frankincense*, assafœtida, turpentine, gum arabic, storax.	Olive, sesame, aniseed, *rose*.	5	*Box-wood*, *cedar* of Lebanon, oak.	*Valonia bark*, *gall-nut*.	*Madder.*	*Cotton.*	Cotton cloths.	Charcoal.		**Asiatic Turkey** Asia-Minor and Mesopotamia	5	*Carpets*, *silk goods*, *sponge fisheries*, Turkey leather.	*Silk*, Angora goat's hair, or *mohair*.	*Sponges*, coral.	Wax.	*Game*, honey.	5
re's	... ...	Tobacco (Caucasus), rhubarb (Turkestan).	... ...	... ...	6	Coniferæ (a).	... ...	Indigo (Caucasus).	Cotton (Caucasus).	Few cotton stuffs (Turkestan).	... ...		**Asiatic Russia** Siberia and Kamtschatka (a) West Turkestan and Caucasus (b)	6	Few silk stuffs (Turkestan).	Silk (Turkestan and Caucasus), wool (Turkestan).	*Furs* and *skins* (*bear*, *wolf*, *fox*, *squirrel*, *beaver*, *glutton*, *lynx*, *sable*, *ermine*, *polecat*, *weasel*, hare, glutton, badger, deer, reindeer, elk (a),—*mammoth ivory* (North Siberia).	*Castoreum* (Siberia).	Broad-tailed sheep (Turkestan), dried fish (Kamtschatka), sturgeon, caviare, isinglass (Siberia).	6
	Ginseng root, *cassia*, *ginger*, *star anise* (a).	*Opium*, *ginseng root*, *rhubarb*, *camphor* (a).	*Gums* (a).	*Sesame*, *camphor* (a), vegetable tallow or wax.	7	*Bamboo*, *sandal-wood* (a).	... ...	*Safflower*, *turmeric*.	*Cotton herb* and *tree*, *hemp* (a),—cotton herb and tree, *hemp*, *flax* (b).	*Cotton stuffs*, *rice* and *bamboo paper*, *Nankin* calico, calico prints (a).	Calico printing, *embroidery*, *lacquered work*, *bamboo work*, *wood carvings*, *screen painting* (a).		**Chinese Empire** China, Corea, Manchooria (a) Mongolia, Thibet, East Turkestan (b)	7	*Flowered satins*, *rich silks*, *ivory carvings* (chess-men, &c.), crape (a).	*Silk* (a),—*wool*, *hair* of Kashmir *goat* (b).	*Skins* and furs of panther, tiger, fox, wolf, sable, hare (a).	*Musk* of musk deer.	Sheep (b).	7
	Cinnamon, *cardamom* (a),—*pepper*, and other spices (b).	Tobacco, *betel-nut* (a, b), *Tonquin bean* (a).	Gums, *varnish* (a), gums (*gamboge*, *gutta percha*), *varnish* (b).	Ground nut, *perfumed eagle-wood* (a),—ground nut (b).	8	*Finest teak*, eagle-wood (a), *teak*, *rose*, and *sapan woods*, *ebony*, *cane*, *bamboo* (b).	*Betel-nut* (a, b).	*Indigo* (a),—*turmeric* (a, b),—indigo, *gamboge* (b).	*Cotton* (a),—*cotton* (b).	*Cotton goods* (a, b).	Wood turning, *bamboo* and *rattan* or *cane* goods, *varnishes*, *Tonquin bean* (for snuff) (a, b).		**Indo-China** Tonquin, Anam, Upper Cochin, Burmah, Pegu (a) Lower Cochin, Siam, Cambodia, Malacca, Straits Settlements (b)	8	*Ivory wares* (a, b).	*Silk* (a, b).	*Elephant tusks*, feathers (a, b).	Wax (a, b).	*Edible swallow's nest* (b).	8
	Star anise (a).	*Camphor* (a).	Vegetable pitch, *varnish* (a).	*Camphor* (a).	9	*Beech*, *ash*, *pine*, *elm*, *maple*, *Japanese cedar*, bamboo (a).	... ...	... ...	Cotton (a), *soft rush*.	*Rice paper*, *cotton goods* (a).	*Japanned* and *lacquered wares*, fancy articles, bamboo fabrics, soft rush *mats* and *chair bottoms* (a).		**Japan** (a), with **Kuriles** (b)	9	*Silk fabrics.*	*Silk* (a).	*Furs* (sea otter, &c.) (Kurile Islands).	... ...	Swine, *sea-slug* (a),—*fish* (a, b).	9
rum erus cao,	*Black pepper*, cloves, cassia, vanilla, *cinnamon*, *ginger*, *aniseed*, chillies, cardamom, *mustard* (a),—*nutmeg*, *mace*, *cloves*, cassia, *cinnamon*, *vanilla*, chillies, *cardamom* (b).	*Camphor tree*, *betel-nut*, tobacco, rhubarb, benzoin, *opium*, + *nux vomica* (a),—tobacco (b).	*Gutta percha*, *india-rubber*, gamboge, benzoin.	*Macassar oil* (of the badean), *cocoa-nut*, *sesame*, *linseed*, *anise*, *camphor* (of tree), *castor oil*, Java tallow, gutta podah wax (a),—*cocoa-nut*, sesame (b).	10	Fine *ebony*, *cane*, *iron-wood*, *sapan-wood*, *cedar* (b), the *above timbers* + *teak* + niaouli tree (a).	*Betel-nut* (a).	*Indigo*, *turmeric*, *arnotto*, *sapan*, *gamboge* (a).	*Cotton*, Manilla hemp, *soft rush* (a),—*Manilla hemp* (b).	*Manilla muslins* (of Manilla hemp) (b).	Marking nut, *rattans* or *cane* goods, *soft rush mats* and *chair bottoms* (a),—*cigar making* (Manilla in Philippines), *Manilla hats* (of Manilla hemp) (b).		**Malaysia**, or **E. Indies** Sundas (a) Moluccas and Philippines (b)	10	... ...	... ...	*Tortoise-shell*, *feathers*, *elephants' tusks*, rhinoceros' horns (a),—*pearls*, feathers.	Turtle eggs' oil (a), *ambergris* (a, b).	*Tortoise*, Celebes' *edible nest* (a).	10
	... ...	... ...	Gum of eucalyptus.	... ...	1	100 kinds of *eucalyptus* (blue gum or fever tree), 300 kinds of leafless *acacia*;—*casuarina*, *banksia*, *sandal*, *black-wood*, musk-wood, *pink-wood*, *marsh oak*, *huon pine*, *araucaria*, *pandanus*, most of them valuable.	... ...	... ...	... ...	... ...	... ...	AUSTRALASIA.	**West** (a) and **South** (b) **Australia**	1	... ...	*Wool* (b).	*sheep-skins* *horns* feathers *hides* Chiefly New South Wales.	... ...	*Sheep*, *potted beef*, *potted mutton*.	1
	... ...	Tobacco.	Gum.	... ...	2		... ...	Indigo.	Cotton.	... ...	... ...		**Queensland** . .	2	*Sheep-rearing.*	*Wool.*		... ...		2
	... ...	Tobacco (a).	Gum.	... ...	3		... ...	... ...	Flax (a),—cotton (a).	... ...	Tobacco factories.		**New South Wales** (a) and **Victoria** (b)	3	Woollen fabrics.	*Wool* (a).		*Tallow*, whale oil, ambergris.		3
	... ...	... ...	Gum (a), copal (b).	Various *oils* (a).	4	Porcupine, and myrtle-wood, eucalyptus (a),—*puriri* (iron-wood), *kauri* (yellow pine), *rimi* (red pine), *black birch* (b).	... ...	... ...	*New Zealand flax* (b).	... ...	Distilleries, breweries, flour-mills, timber-mills, starch and soap factories (a).		**Tasmania** (a) and **New Zealand** (b)	4	Candle and soap factories, *tanneries* (a).	*Wool* (a, b).	... ...	*Tallow* (a)	... ...	4
	Ginger, nutmeg.	Tobacco.	*Gutta percha.*	Camphor (tree).	1	*Ebony*, teak, *niaouli* tree, &c. (on the whole like Malaysia.)	... ...	Indigo, sapan dye, turmeric.	Cotton.	... ...	... ...	OCEANIA.	**Melanesia** (Islands north of Australia)	1	... ...	... ...	*Pearls*, tortoise-shell, *feathers* (of birds of paradise), &c.	... ...	Tortoise, edible bird's nest, *trepang* or sea cucumber (a holothuria).	1
	... ...	Tobacco.	... ...	Sandalwood perfume.	2	*Pandanus*, *casuarina*, sandal, &c.	... ...	Indigo.	Cotton.	... ...	... ...		**Micronesia** (Islands north of Papua)	2	... ...	... ...	*Tortoise-shell.*	... ...	Fish, turtles.	2
	... ...	... ...	... ...	Cocoa-nut oil, sandalwood perfume.	3	*Pandanus*, *casuarina*, sandal, &c.	... ...	... ...	*Paper mulberry*, cotton, vegetable silk or pula.	... ...	... ...		**Polynesia** (Isles of C. Pacific)	3	... ...	Wool.	*Nacre* (mother-of-pearl).	... ...	... ...	3

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HIGHER COMMERCIAL INSTRUCTION, BY JOHN YEATS, LL.D., F.G.S., F.S.S., &c.

CHART OF THE ALIMENTARY AND INDUSTRIAL PRODUCTS OF THE VEGETABLE KINGDOM.

SHOWING the DISTRIBUTION of the PLANTS most USEFUL to MAN; according to Zones, Sub-Zones,—to their Forms, Properties,—to the parts they play in the Industries of Man,—and the Alimentation of both Man and his Four-footed Servants. To which are added Zones of "Artificial Drinks," of "Culinary Hydrocarbons," "Northern Limit of Food Plants and Amentaceous Timber-Trees."

Latitudes, with Isotherms.	Zones.	Characteristic Flora of the Zones.	Isotherms: Zones.	Isotherms: Sub-Zones.	Characteristic Flora of the Sub-Zones.	Sub-Zones.	Zones of Artificial Drink, Luxurious or Necessary.	Zones of Culinary Hydro-Carbons, viz., Oil and Fat.	Nature of the Herbage.	Latitudes.	Northern Limits of the Main Food Plants and Timber-Trees.
90° 10° F.	FRIGID.	Scanty, dwarf and creeping plants. Unicellular confervæ and diatoms. Zone of moss and lichen. Zone of upper Alpine plants (simple, but of bright colours, red and blue), as saxifrage, ranunculus, gentian, &c. Berries, dwarf birch, alder, and creeping willow.	28°	20°	Scanty carpet of lichen and moss. Unicellular confervæ and diatoms and red-snow algæ. Dwarf upper Alpine herbaceous plants (saxifrage, sedum, potentilla, ranunculus, primulæ, and vaccinium, artemisia, claytonia, draba; all simple and bright).	POLAR.		Whale and seal oil and musk-ox fat. ?	Scanty patches of lichen and moss.	90°	
72° 32° F.				36°	Sedges (carices) replace the grasses (gramineæ). Lichen (reindeer moss), mosses. Berries. Dwarf upper Alpine herbaceous plants (chiefly gentian, saxifrage, ranunculus). Alpine woody plants (as rhododendron, azalea, kalmia). Few coniferæ. Stunted amentaceæ (willow, alder, birch).	ARCTIC.	Seal and whale oil.	Whale and seal oil and musk-ox fat. ?	Carpet of moss and sedges (carex), replacing grasses.	72° 70° 68°	70° Potato (Europe), birch and willow (old world). 68° Barley, oats, rye (Europe), fir (old world).
66° 40° F.	TEMPERATE.	Vegetation sober on the whole. Fine pastures ever-green in North. European deciduous trees (angiosperms). (a) Amentaceæ (birch, alder, poplar, oak, elm, lime, horse-chestnut, beech—yielding timber). (b) Rosaceæ (fruit trees, most). (c) chestnut, walnut, hazel-nut. Coniferæ (gymnosperms), as fir, pine, larch, cypress, juniper, cedar, yew. Herbaceous plants, mainly cruciferæ, umbelliferæ, and herbaceous leguminosæ and compositæ. Cereals (wheat, barley, oats, rye, in North and Centre). Cotton herb and shrub, fig, date, sugar, olive, laurels, rice, maize, south of the zone. Amentaceæ begin here. ↑ Coniferæ (except a few subtropical forms) begin here.	58°	44°	Rich carpet of simple flowers. Woody Alpine plants as in Arctic subregion. Reindeer lichen and Iceland moss. Berries. Scanty grasses (gramineæ) replaced by sedges (carex) and rushes (juncaceæ). Coniferæ are the chief trees, with some amentaceæ, as beech, willow, alder, birch.	SUB-ARCTIC.	Spirits (from berries, as juniper) and spruce beer, and animal milk.	Seal and fish oil, and grease of bear and other carnivora, and imported linseed oil.	Carpet of sedges and rushes, mainly replacing grasses (gramineæ).	66° 64° 62° 60°	64° Birch, willow (America), lime-tree (old world). 62° Wheat (Europe), fir (America). 60° Potato (Asia), barley, oats, rye (Asia), peach, cherry, plum, beech, elm (old world).
58° 48° F.				54°	Rich evergreen pastures. Deciduous timber-trees (amentaceæ), as horse-chestnut, lime, elm, oak (bark). Deciduous fruit-trees (rosaceæ mainly). Coniferæ thrive, and yield tar, turpentine, and various resins. Umbelliferæ, cruciferæ, cichoraceæ, and heather abound. Hops, oats, barley, and rye thrive. Flax, hemp, and wheat thrive fairly.	COLD TEMPERATE.	Spirits from barley and potato (whisky, wodka, mouchamore, and common brandy), and animal milk. Barley and hop beer, with currant, gooseberry, rhubarb, and elder wines, and animal milk. Cider and perry, with animal milk.	Animal butter, and hazel, beechnut, and linseed vegetable oils, and imported olive oil.	Meadow zone, with fine soft herbage, evergreen in northern part, and of artificial grass (viz., pod-bearing), as clover, vetch, &c.	58° 56° 54° 52° 50° 48°	56° Lime-tree, apple, and pear (old world), barley, oats, rye (America). 54° Beech, elm (America). 52° Potato (America), hops (Europe). 50° Wheat (Asia, America), tobacco, and grape (not wine) (Europe). 48° Maize (Europe).
60° F. 45°				64°	Evergreen dicotyledonous trees and shrubs (myrtles). Grape, orange, almond, wheat, mulberry, olive, pistachio, tea, cotton shrub, cork-oak, flax, and hemp thrive. Aromatic labiates, myrtles, and others yield volatile oils. Poppy (opium), rhubarb, manna, foxglove, belladonna, castor-oil plant, and tobacco yield medicinal extracts. Liliaceæ (hyacinth, tulip, &c.), with asters and solidago abound.	WARM TEMPERATE.	Ordinary wines (thin, astringent, and tartaric), with animal milk. Fermented milk and honey (hydromel), koumiss, rich wines (thick, syrupy, and sweet), with animal milk.	Vegetable oil (*olive* and walnut), with animal butter.		45° 44° 40°	44° Maize (Asia), rice (old world), hops (America), grape wine (Europe). 40° Maize (America), tobacco, and wine (America).
68° F. 34°				70°	Myrtles and laurels. Aromatic gums (myrrh, &c.) Industrial gums (arabic and others), from acacia. Prickly shrubs (acacia); arborescent euphorbiaceæ. Magnolia, date-palm; tea, camellia. Medicinal extracts, &c.: senna, opium, balm of Gilead, bay laurel, ipecacuanha, ginger, and the resins; asafœtida, jalap, &c., and the solid oil, camphor.	SUB-TROPICAL.	Fermented sugar (rum), and juices, fermented or otherwise, of date and other juicy fruits.	Vegetable oil (olive).	Fine herbage in highlands and forests of India and S. Africa; the rest of the zone is covered with llanos, selvas, the deserts of Sahara, Arabia, and C. Australia (this with kangaroo grass).	34° 32° 30° 25°	34° Palms, with date-palm (old world) [southern limit of amentaceæ]. 32° Rice (America). 30° Palms (America), thea (old world). 25° Sugar-cane.
74° F. 23° 20′	TORRID.	Luxurious vegetation. Tree orchids and lianas in South America. Terrestrial orchids in Malaysia. Palms (date, cocos, sago), arrowroot, sugar, banana, plantain, fig, cycadaceæ, cactaceæ, coffee, spices. Cereals (maize, durrha, rice). Arborescent gramineæ. Arborescent leguminosæ (mimosa). Medicinal barks: euphorbiaceæ, and aromatic plants. Cotton shrub and tree.	78°	76°	Figtree, tree ferns. Date-palm, cacao-palm, cocoa-nut and sago-palms. Pineapple, tamarind, durian, guava. Tallow and butter trees. Spices (vanilla, cinnamon, cayenne pepper, ginger, clove, allspice). Medicinal and industrial resins (copal, guiac, gumlac, balsam of Peru, aloes). Medicinal barks (Peruvian or cinchona, quassia). Cotton shrub and palm fibres.	TROPICAL.	Vegetable milk (from various trees).	Vegetable butter (nipal and shea) and vegetable oil (cocoa-nut, &c.)	Fine herbage during six months (rainy season), but often inclined to turn rank and woody, and parched up during six months (dry season).	23° 20′ 20°	23° 20′ Bread-fruit, plantain, banana, sago, arrowroot, cocoa-nut, coffee, spices, opium, betel-nut. 20° Manioc, yam, arum root, batata (America).
78° F. 15° 82° F. 0°				80°	Palms (cocoa-nut, cabbage, and sago). Banana, plantain, yam, arrowroot. Mango, bread-tree, butter-tree. Elais (palm-oil tree). Arborescent gramineæ. Pandanus pine, lianas, sapindaceæ. Medicinal barks (sarsaparilla, &c.) Spices (black pepper, pistachio nut, nutmeg, mace). Gums (catechu, gutta-percha, &c.) Cotton tree, palm fibres.	EQUATORIAL.	Vegetable milk (from various trees) and palm-wine.	Vegetable butter and tallow and palm oil.		15° 10° 0°	10° Manioc (Asia), coca leaf for chewing (as betel-nut of America).

Sub-Zones.	ALIMENTARY.						
	MAN.						
	Essential Food.		Supplementary Food.			Accessories to Health and Comfort.	
	Nitrogenous or Flesh-Forming.	Carbonaceous, or Fat-Forming and Heat-Giving.	Vegetables or Green Food.	Condiments (Seasoning and Spices).	Fruit.	Beverage or Liquid Food.	Medicaments.
	Albuminous: *Glutinous* — Cereals of Temperate Zone. *Leguminous* — Pod-bearing Plants.	*Amylaceous* (Starch). *Saccharine*: Sugar (fermented), Mannite (unfermented).	*Leaf* in most. *Root* in several. *Tuber* in few. *Fruit* in Cucurbitaceæ only.	*Bark* (Cinnamon). *Seeds and Oil Extract* (Pepper, Lemon). *Root* (Horse-Radish, Ginger). *Leaf* (Bay Laurel, Thyme).	*Fleshy* — Sugar, Gluten. *Nutty* — Oil, Starch. A. = Starch. G. = Gluten. O. = Oil. S. = Sugar.	*Natural* — Water, Juice of Fruit (unfermented), Milk (Animal and Vegetable). *Artificial* — Stimulants (Wine, Spirits), Neurotics (Tea, Coffee, Cocoa).	*Genuine* (Soothing, Emollient, &c.) *Artificial* (Narcotics).
POLAR.						N. Ice water. Animal oils (seal, &c.)	
ARCTIC.					Berries of dwarf shrubs—G.	N. Ice water. Animal oils (seal, &c.)	
SUB-ARCTIC.	G. Tripe de roche (lichen), Berries — Various. Rye, Barley — Cereals.				Berries of dwarf shrubs—G.	N.—Water, milk (animal). A. Spruce beer. Spirits (from berries).	
COLD TEMPERATE.	G. Irish moss (carrageen); Truffle, Morel — Mushrooms; Buckwheat — Various. Barley, Oats, Rye — Cereals. L. Pea (chick-pea), Lentil, Horse-bean, French bean, Soy bean — Leguminosæ.	Beetroot (sugar), Maple (sugar) — S. Potato —A.	Beetroot (R.) Cabbages (L.) Carrot (R.) Celery (L.R.) Endive (L.) Girasole artichoke (T.) Lettuce (L.) Onion (R.) Parsnip (R.) Potato (T.) Radish (R.) Swede (R.) Spinage (L.) Turnip (R.) Vegetable marrow (F.)	Aniseed. Celery. Chive. Carraway. Coriander. Cumin. Garlic. Horse-radish. Leek. Mustard (seed and leaf). Onion. Parsley. Peppermint. Shallot. Savoury. Sage. Thyme. Tomato.	Apple, Cherry, Currant, Gooseberry, Medlar, Pear, Plum, Quince, Raspberry, Strawberry — G. Chestnut—A. Beechnut, Hazelnut, Walnut, Hickory-nut — O.	N.—Water and animal milk. A. Spruce beer, Hop and barley beer — Beers. Currant, gooseberry, rhubarb, elder — Homely wines. Cider, perry — Pomaceous wines. Of barley and potato (whisky, common brandy, wodka, mouchamore, schiedam, and English gins — Spirits. Cherry brandy, absinthe, Raspberry syrup — Liqueurs and syrups.	G. Belladonna. Buckthorn. Chamomile. Dandelion. Ergot of rye. Foxglove (digitalis). Ginseng. Linseed (meal and oil). Mustard (leaf, meal, and oil). Male shield-fern. Marsh mallow (guimauve). Squill. Wormwood.
WARM TEMPERATE.	G. Mushrooms—Fungi. Barley, Wheat — Cereals. L. Various peas, ,, beans, Carob-bean or St. John's bread, Lentils — Leguminosæ.	Manna of flowering ash — Mannite. Beetroot, Maple, Grape-sugar, or starch-sugar, or glucose — Sugar. — S. Potato, Maize, Rice, Guinea-corn or durrha, Sweet potato or batata — A.	Artichoke (T.) Beetroot (R.) Carrot (R.) Cabbages (L.) Cucumber (F.) Endive (L.) Girasole artichoke (T.) Lettuce (L.) Melon (?) (F.) Potato (T.) Parsnip (R.) Pumpkin (F.) Spinage (L.) Swede (R.) Seakale (L.) Sweet potato (T.) Turnip (R.)	Almond. Bay laurel. Chive. Cassia. Citron (candied). Celery. Cucumber. Garlic. Leek. Lemon. Mustard (seed). Olive (oil). Onion. Star aniseed. Shallot. Tomato.	Apricot, apple, Citron, currant, Cucumber?, Fig, Hottentot fig, Lemon, loquat, Melon, Mulberry, Medlar, Orange, Pomegranate, Prunes, French plum, Pear, peach, Quince, raspberry, Shaddock, Strawberry, Tamarind — G. Grapes, raisins—S. Chestnut—A. Bitter and sweet almonds, Hazel and walnuts — O.	N.—Water and animal milk. A. Grape, Orange — Astringent and acid wines. Grape — Syrupy and sweet wines. Chica of La Plata, Cognac brandy — Spirits. Chartreuse, Anis, Noyau, Kirschwasser, Absinthe, Maraschino, Raspberry syrup — Liqueurs and syrups. Lemonade, Lemon juice, Tea (from thea), Tea (from yerba mate) — Mild unfermented drinks.	G. Almond (bitter). Assafœtida, angelica. Belladonna. Castor oil. Foxglove (digitalis). Hellebore. Jalap. Liquorice. Linseed (meal and oil). Lemon juice. Manna. Marsh mallow (guimauve). Male shield-fern. Mustard (leaf, meal, and oil). Olive oil. Orange (sweet and bitter). Poppy (opium, laudanum). Rhubarb. Squill, scammony. Wormwood. A. Hemp herb (guniah or bhang). Poppy (opium), tobacco.
SUB-TROPICAL.	G. Fig, Date, Banana — Various. Wheat—Cereals.	Cane-sugar, Date-sugar — S. Rice, Guinea-corn or durrha, Maize, Sweet potato or batata, Samh of Bedouins — A.	Melon (?) (F.) Pumpkin (F.) Salep root (R.) Sweet potato (T.)	Bay laurel. Cassia. Ginger. Lemon. Olive. Tomato.	Banana, Fig and Hottentot fig, Lemon, Loquat, Melon, Orange, Pineapple, Pomegranate, Shaddock, Tamarind — G. Date (palm), Vine (grape) — S. Olive and Brazil nut—O.	N.—Water. A. Grape — Syrupy and sweet wines. Rum from sugar, Brandy from grapes, Fermented dates, &c. — Spirits. Unfermented juice of date and other fruits, Thea (tea), Coffee — Mild unfermented drinks.	G. Asafœtida. Aloes. Balm of Gilead. Camphor. Fig? Gum arabic. Ipecacuanha. Jujube, jalap. Lemon juice. Myrrh. Poppy (opium, laudanum). Pomegranate bark. Sarsaparilla. Senna, scammony. A. Hemp (extract), bhang. Hemp resin (churus and kashash). Opium, tobacco.
TROPICAL.	G. Bread-fruit, Fig, Banana, Plantain, Date, Cocoa-nuts (single and double) — Various. L. Ground nut — Leguminosæ.	S. Date-sugar—Various. Cane-sugar A. Rice, Guinea-corn or durrha, Maize, Samh of Bedouins — Gramineæ. Sago (palm), Arrowroot, Tapioca (manioc), Portland sago, from arum root, Sweet potato — Various.	(T.) Sweet potato, (F.) Melon (?), (L.) Cabbage-palm — Various. (R.) Ground nut — Leguminosæ.	Allspice. Chillies. Capsicum. Cardamom. Cloves. Cinnamon. Cashew nut. Ginger. Pepper (cayenne and black). Pistachio nut. Vanilla.	Avocado pear, Banana, bread-fruit, Cassava, Custard apple, Dammar, durian, Fig, Guava, granadilla, Jambose, jackfruit, Mangosteen, Mango, melon, Orange, Papaw, prickly pear, Plantain, pineapple, Shaddock, Tamarind — G. Date (palm), Grape (vine) — S. Cocoa and cashew nuts, Ground nut — O.	N. Water. Vegetable milk. Traveller's drink of Madagascar. A. Rum from sugar, Ocili from agave — Spirits. Curaçoa, Angostura bitters — Liqueurs. Cacao (chocolate) and other fruit — Unfermented drinks.	G. Croton oil. Camphor. Cascarilla. Cinchona (Peruvian bark). Cedron. Copaiva balsam. Fig? Ginger. Jujube. Jalap. Myrrh. Nux vomica (strychnos). Quassia. Sarsaparilla. Scammony. A. Betel-nut. Tobacco.
EQUATORIAL.	G. Bread-fruit, Banana, Plantain, Cocoa-nuts (single and double), Yam — Various. L. Ground nut — Leguminosæ.	S.—Cane-sugar A. Rice, Maize, Guinea-corn — Gramineæ. Arrowroot, Sago (palm), Sweet potato — Various.	(T.) Sweet potato, (L.) Cabbage-palm — Various. (R.) Ground nut — Leguminosæ.	Allspice. Cloves. Cinnamon. Cardamom. Cashew nut. Ginger. Mace. Nutmeg. Pepper (black and long). Pistachio nut. Vanilla.	Bread-fruit, Banana, Cassava, Custard apple, Dorian, Jambose, Jackfruit, Guava, Mango, Mangosteen, Plantain, Papaw, Tamarind, Yam — G. Cocoa-nuts, Cashew nut — O.	N. Water. Vegetable milk. A. Rum from sugar—Spirits. Palm—Wine. Coffee and various fruits — Unfermented drink.	G. Croton oil. Camphor. Cinchona, or Peruvian bark. Sarsaparilla. A. Betel-nut. Coca-leaf. Tobacco.

Sub-Zones.	ALIMENTARY.	ALIMENTARY, INDUSTRIAL, OR BOTH.		INDUSTRIAL.			
	Domesticated Cattle (Equine, Bovine, Ovine, and Porcine Tribes).						
	Fodder.	Oils or Hydrocarbons (C.H.(o).)	Pseudo-Hydrocarbons (C+aq.)	Fibres and Flexible Tough Stalks.	Dyes.	Timber.	Miscellaneous Industries.
	Natural (Gramineæ). *Artificial* (Turnip, Mangel, Carrot, &c.)	*Fixed* or True Oils. *Volatile*, or Essences and Perfumes. 1 means Solid and Fixed. 2 ,, Liquid and Fixed (or true Oils). 3 ,, Essential (Volatile) = HC. 4 ,, ,, ,, = HC+O. 5 ,, ,, ,, = HC O+S.	*Gums* (Soluble in Water). *Gum Resins or Balsams* (partly Soluble). *Resins* (Insoluble in Water). 1 means Pseudo-resins (allied to Oil). 2 means Oleo-resins. 3 ,, True Resins. 4 ,, Gum-resins and Balsams. 5 ,, True Gums. 6 means Embryonic Gums or Jellies. 7 means Sugar-gum or Mannite. 8 means Starch-gum or Cellulose.	*Twisted or Corded* (Thread, Net, Rope). *Woven* (Clothing, Bed and House Linen, Sacking, Mats). *Plaited* (Mats, Baskets, Chairs, Cradles).	– *Tinctorial* (Dyeing or Colouring). × *Tanning* (Astringent and Acid).	*Structural* or Building. *Ornamental* or Cabinetmaking.	
POLAR.							
ARCTIC.	N.—Reindeer moss (a lichen).						
SUB-ARCTIC.	N. Reindeer moss (a lichen). Iceland moss (a lichen).	Juniper, Turpentine — 3.	Tar—2.		Cudbear (lecanora), Litmus (rocella) — –	Balsam, hemlock, and spruce firs, with juniper — N. America. Spruce and Scotch firs, with dwarf birch and willow — Europe.	
COLD TEMPERATE.	N. Common grasses, Tussac grass A. Wheat, oats, barley, rye, maize, rice, rye grass, malted corn and combs — Gramineæ. N.—Gorse or furze tops. A. Pea-halm, lucerne, clover, vetches, trefoil, beans — Leguminosæ. N.—Prangos of Thibet. A. Chicory, cabbage, rape, turnip, mangold, swede, beetroot, marrow, potato, mustard, radish, buckwheat, Jerusalem artichoke, oil-cakes (linseed, rape, cocoa-nut, palm), molasses, crushed dates — Various.	Myrtle (candleberry), cabbage, plum, katkin of birch, alder, poplar, ash — Wax—1. Linseed, rape, hazel, beech, walnut, hemp, garden cress, white mustard (only vegetable oil containing stearine), colza seed, turnip seed — 2. Juniper, savin, turpentine—3. Birch bark (to prepare Russia leather), peppermint, lavender, thyme, rosemary (for eau de Cologne), coriander, cumin, aniseed, fennel, penny-royal, caraway, spearmint — 4. Garlic, onion—5.	Dandelion, poppy, lettuce (medicinal)—1. Tar, turpentine, Bordeaux turpentine, Strasburg turpentine — 2. Pitch, colophane (yellow resin or resin pitch), yellow Burgundy pitch, black pitch — 3. Canada and Carpathian balsams—4. Roasted starch gum (for calico print), salep (of orchis mascula), dextrine or gummy starch (got by diastase's action on starch) — 5. Pectin (vegetable jelly) of ripe fruit, Pectose (vegetable jelly) of unripe fruit — 6. Mannite (fermented juice of carrot, flowering ash, beet, onion). Saponine (of horse-chestnut). Salicine (willow, aspen) — 7.	Flax, Flock of cotton poplar — W. Hemp—W. T. Bulrush, Osier — P. Bast—T. P.	Alkanet, alder, Madder, Oak gallnut, Oak bark, Saffron, Weld, Woad — – Larch bark, Hemlock fir bark, Oak bark — ×	Ash, alder. Birch, black walnut. Beech. Cedar, cherry, cypress. English elm, elder. Holly. Limetree, larch. Norfolk pine (S. hemisphere). Oak. Poplar. Sycamore (great maple). *Scotch elm.* Walnut. Yew.	Bast (from lime-tree, for ropes, mats, twine). Bulrush (chair bottoms). Genêt (planta genista), for brooms. Dutch rush (equisetum), for scrubbing. Seaweeds (for kelp, soda). Orris root (for tooth and violet powder).
WARM TEMPERATE.	A. Black and white mulberry leaf, for silk-worms — Various. N. and A. Clover, Saintfoin, Vetch, Lucerne, Trefoil, Horse-bean, Carob-bean — Leguminosæ. A. Wheat, and chaff; Oats, ,,; Barley, ,,; Maize, ,, N. Common grass. Esparto or halfa — Gramineæ.	Cabbage (wax)—1. Linseed, olive, castor (purging), hazel, walnut, garden cress, hemp, white mustard (see above), sweet almond, poppy, salep (of orchis mascula) — 2. Orange oils (solid and liquid), neroli, bergamot, lemon — 3. Cumin, aniseed, caraway, grass and lemon grass, cassia, roses (attar of), both solid and liquid), peppermint, jessamine, lavender, rosemary (see above), verbena, heliotrope, patchouli, bitter almond — 4. Asafœtida, garlic, onion, mustard, opoponax — 5.	Dandelion, poppy (medicinal)—1. Mastic or Chian turpentine—2. Japan lacquer, sandarach or pounce, pitch, natural varnish of China — 3. True frankincense (olibanum), Brown storax balsam (semi-liquid), White or red storax balsam (solid), Myrrh (or pseudo-frankincense), Opoponax. Scammony (purging), Balm of Gilead — 4. Tragacanth (cherry gum), Salep (as above), Dextrine (as above) — 5. Pectin, Pectose — as above—6. Mannite (as above)—7.	Vegetable silk (pula), Cotton herb, Flax, Flock of cotton poplar, New Zealand flax or phormium tenax — W. Hemp—W. T. Bulrush, Soft rush, Osier — P. Paper mulberry of China and Japan — For crape and paper. Dwarf Algerian palm — T.	Litmus (orchil), Oak gallnut, Turnsole (test-paper), Valonia oak, Yellow or Persian berries — – Oak gallnut, Valonia oak, Sumach — ×	Boxwood, black walnut. Bordeaux fir, black birch. Cedar, cherry, cypress. Cork-oak. Douglas pine. Holly, hickory. Ironwood (purini of New Zealand). Magnolia. Pencil-cedar. Red pine (rimu of New Zealand). Sycamore, swamp fir. Sandarach or mosquewood (a thuja). Walnut, wellingtonia (sequoia). Yellow pine (kauri of New Zealand). Yew.	Cork-oak (for cork). Heath (for brooms). Mulberry (for silk-worm). Roses (for scent). Rice pith (for paper). Rushes (for chairs and baskets). Salsola (soda-yielding plants). Tinder (amadoue), from a fungus: polyperus. Fuller's teasel (for fulling).
SUB-TROPICAL.	A.—Maize and rice. N. Luxuriant gramineæ, but no true herbage except at great altitude — Gramineæ.	Butter of cacao, laurel oil—1. Olive, poppy, benniseed, ground nut, sesamum, ram-til — 2. Orange, neroli, lemon, bergamot — 3. Keova (of screw-pine), verbena, aloes wood, saffron, patchouli, cajeputi, heliotrope, camphor (solid) — 4. Asafœtida—5.	Poppy (medicinal)—1. Euphorbia of Canaries, Banyan figtree (India), yields a milky drink — 1. Guiac, sandarach or pounce, Jalap (medicinal), Natural varnish of China — 3. Scammony (purging), Asafœtida (medicinal), Myrrh, frankincense, Liquid ambar (liquid), benzoin — 4. Arabic, Senegal, Bassorah—5. Pectin and pectose (as above)—6. Mannite (of flowering ash)—7.	American aloe—W. T. Cotton shrub, Nepal fibre, Pita flax — W. Bamboo and other arborescent gramineæ — P. Jute—P. T. Paper mulberry (see above), Papyrus (Egypt) — Paper.	Fustic, Logwood, Litmus (orchil), Quercitron, Red sanders wood, Safflower, Sumach, Turmeric — – Mimosa bark, Kino — ×	American cedar. Bamboos. Gum trees. Laurels. Mimosæ (acacia, mimosa). Sandarach (mosquewood). Yellow pine (kauri of New Zealand).	Bamboo (for many uses, among them for chairs, baskets, screens, cradles). Balsa (light and soft wood used instead of corks, and to make rafts; the silk of the capsule is used to stuff cushions).
TROPICAL.	N. and A. Dates, Barbadoes gooseberry plant, Prickly pear plant — Various. A. — Rice and maize. N. Kangaroo grass, gama grass, and other tall gramineæ; No true herbage except during the rainy season; all grasses are parched up during the dry season — Gramineæ.	Shanghai wax, Gutta podah — Wax—1. Cocoa-nut butter or oil, Tallow (tree), shea butter, Laurel and nutmeg oils, Epie oil or butter, Ilpa oil or butter, Kokum butter, Piny tallow of India — 1. Benniseed, ground nut, Sesamum, croton, ram-til — 2. Cinnamon, cloves, Sandalwood, Aloes wood, vanilla, Cajeputi, camphor — 4.	Cowtree (Ceylon), Hya-hya (Guiana), Banyan figtree (India) — Milky drink — 1. Aloes (purgative), Natural varnish of S. America — 3. Euphorbium, galbanum, Gamboge or gum gutt, Benzoin balsam, which enters into composition of Friar's balsam, Brown balm of Peru (solid), Black balm of Peru (liquid), Balsam of Tolu — 4. Yellow gum (Australia), Eucalyptus gum (Australia), Catechu — 5. Pectin and pectose (as above)—6.	Arang palm, Adam's needle, Bread-fruit fibre, Cotton shrub, Cotton tree, Cacao fibre, Jackfruit fibre, Manilla hemp, Pita flax, Bengel's sun-hemp — W. Cord rush, Cable cane, &c. — T. P. Jute, Torquilla leaf, Bamboo, rush — P. Cocoa-nut fibre — W. T. P. Paper mulberry — For crape and paper.	Assam roon, Camwood, Cochineal cactus, Fustic, Indigo, Logwood, Myrobolans, Peachwood, Quercitron, Red sanders wood — – Sappan or bukkum, Turmeric, Betel-nut, Kino, Mimosa bark — ×	American cedar, arar (a thuja). Blackwood (Australia), bamboos. Baobab, beef-tree, bread-tree. Cocoa-nut (porcupine wood). Ebony, East Indian ebony. Eucalypti (hundred kinds of gum-trees, Australia). Gordonia (Hindoo-wood), ginko (a conifer). Huon pine (Australia), ironwood. Jackfruit tree. Lignum vitæ, lancewood, locust-tree. Mahogany, mimosa. Muskwood and metrosideros (Australia). Palms (many). Pinkwood (Australia). Rosewood. Sapan, satin, snake, and sandal woods. Teak, trumpet-wood. Tree ferns (many). Zebra-wood.	Bamboo (as above). Cocoa-nut palm (for a hundred various uses: food, drink, dwelling, utensils, implements, clothing, &c.) Cord rush (for ropes). Tonquin bean (for snuff), Tonquin.
EQUATORIAL.	N. Tall luxuriant grasses; No real herbage except at some altitude during the rainy season; during the dry season all is parched up — Gramineæ.	Cocoa-nut oil, Palm oil, Tallow tree, Butter tree, Java butter, or mynak kawon — 1. Gutta podah (wax)—1. Ground nut, croton—2. Cinnamon, cloves, Camphor (solid) of Borneo — 4.	The family of sapotaceæ yield: Bottle india-rubber, Caoutchouc (india-rubber), Gutta-percha of Malaysia — 1. Dragon's blood—3. Euphorbium, galbanum, Brown balm of Peru (solid), Black balm of Peru (liquid) — 4. Pectin and pectose—6.	Banana flax, Bread-fruit fibre, Cotton tree, Cotton shrub, Jackfruit fibre, Manilla hemp — W. Torquilla leaf, Bamboo — P. Cable cane and others — P. T. Coir fibre—T. P. W.	Arnotto, Brazil wood, Brazilletto wood, Cochineal cactus, Fustic, Gamboge, Indigo, Peachwood — – (Acacia) catechu, Divi-divi — ×	Arar (a thuja). Brazil and Braziletto woods. Beef-wood, bread-fruit tree. Baobab (largest of trees). Bamboos. Cocoa-nut tree (porcupine wood). Eucalypti (see above). Ironwood, jackfruit tree. Locust-tree, lignum vitæ, lancewood. Mahogany, metrosideros (Australia). Palms (many kinds abound). Peachwood. Rosewood. Satin and snake woods. Sandal and sapan woods. Trumpet-wood. Tree ferns. Teak. Zebra-wood.	Bamboo (as above). Cocoa-nut (as above). Coquilla nut (a vegetable ivory for turners). Corozo nut (used as coquilla). Marking nut (to mark linen). Rattans (canes of commerce, asssticks, &c.) Tonquin bean (for snuff), Guiana.

[*Prepared for Dr. Yeats's "Natural History of the Raw Materials of Commerce," by* L. A. J. ROBERTI, B.Sc., F.G.S., &c.]

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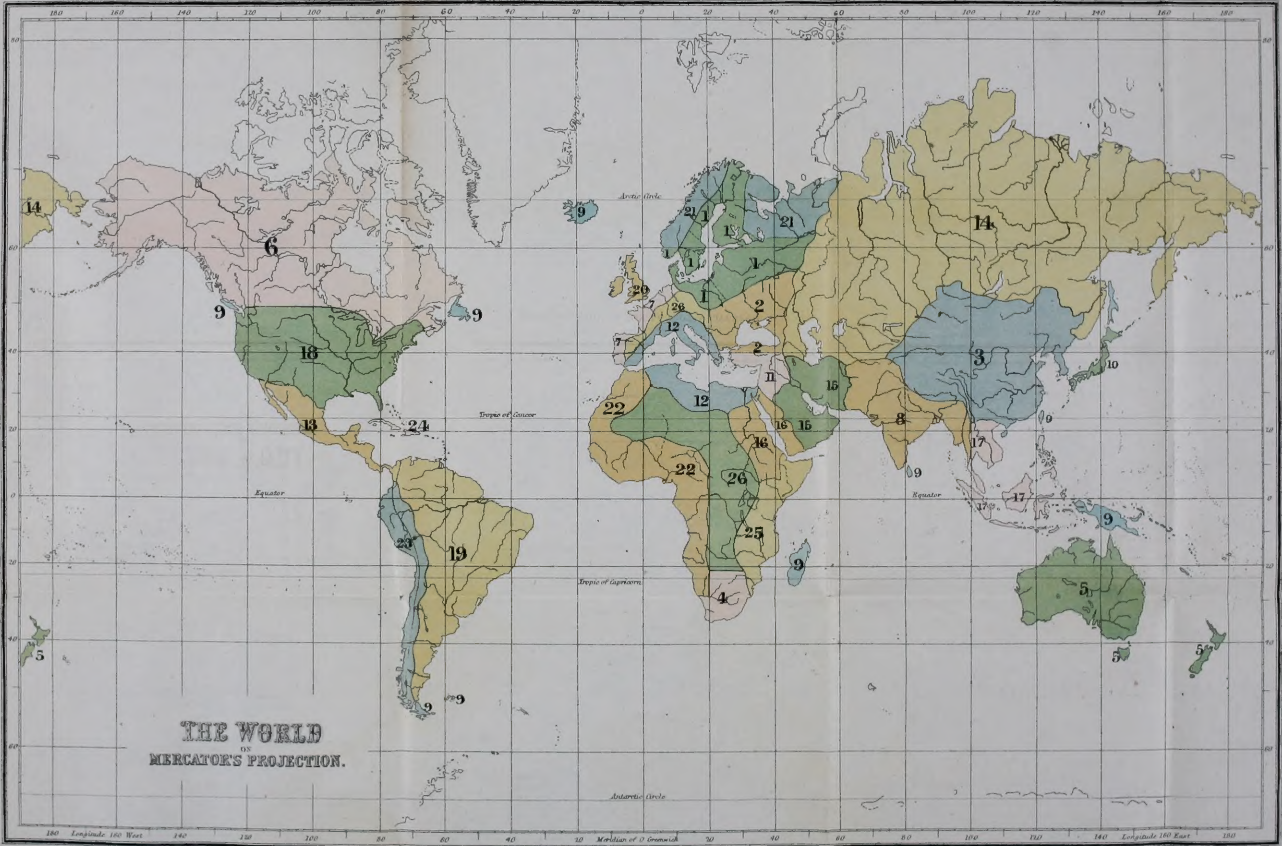
THE NATURAL DIVISIONS OF INTERNATIONAL TRADE.

NUMBERS REFERRING TO TRADE-NAMES.

1. Baltic Trade = *All* the Baltic seaboard.
2. Black Sea ,, = South Russia, Danubian Provinces and Asia Minor, N.
3. Chinese ,, = China, Corea, Mongolia, Anam, Cochin China, and Tonquin.
4. Cape ,, = South Africa.
5. Colonial ,, = Australia, New Zealand, and Tasmania.
6. Canadian ,, = British North America.
7. General ,, = Seaboard between Hamburg and Gibraltar.
8. Indian ,, = Hindostan and Burmah.
9. Island ,, = The various Trade Islands.
10. Japanese ,, = The Islands of Japan.
11. Levant ,, = Asia Minor, S., Syria, and Mesopotamia, N.
12. Mediterranean Trade = N. and S. Shores of the Mediterranean Sea.
13. Mexican Trade = Mexico, Central America, and Panama Isthmus.
14. North and Central Asian Trade.
15. Persian Gulf Trade = E. Arabia, S. Mesopotamia, Persia, W. Afghanistan, and Beloochistan.
16. Red Sea Trade.
17. Straits and East Indian Trade = Malay Peninsula and East Indian Islands.
18. The States Trade = The United States of America.
19. South American Trade.
20. United Kingdom ,,
21. White Sea and Norwegian Trade.
22. West African Trade = W. Morocco, Gold Coast and W. Africa.
23. West Coast ,, = West Coast of S. America.
24. West Indian ,, = West India Islands.
25. Zanzibar ,, = East Africa and Mozambique.
26. Intermediate Zones = Tracts of country occupying Central Europe and Africa, having equal facility of outlet into many trade divisions without having any *special direction.*



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1887.

On a few of the Difficulties that retard the progress of Higher Commercial Instruction, and prevent the study of Commerce as a Science in England, adapted from a letter to the "Journal of the Society of Arts," *by* Dr. YEATS. London. July 1, 1887.

I. *What chiefly prevents the wider study of Commerce in England?*
II. *Why is it promoted abroad as part of public School-instruction?*
III. *What can be learned of Commerce out of a Counting-house?*
IV. *Are Continental Trade-schools connected with the old Guilds or the Government?*
V. *Is there anything new or special in their preparation for business?*
VI. *Is Commerce rightly considered a science?*
VII. *What does the science of Commerce comprise?*
VIII. *Should it be systematically taught everywhere?*
IX. *Might not Industrial Universities interfere with business enterprise?*
X. *Are there any English Text-books for the study of Commerce?*

INDIFFERENCE is the greatest difficulty; and misapprehension of our true position causes it. Many say: "*Why should commerce be generally or even widely studied, when it concerns the mercantile part of the community only?*"

The mercantile part is the larger and more important one, and the principles of exchange affect every member of the community. Agriculture will not suffice for a growing population like ours; the best resource now is the deck of a merchantman, or a desk on 'Change.

Seven hundred individuals leave our country every day, literally to "seek their fortunes;" and how are they prepared for the task? Even after their departure, eleven hundred others, strangers, need providing for. Of the two great factors of wealth,—materials and intelligence,—*the latter only* can be multiplied and made common property; happily it is the more valuable. On this head Mr. Robert Mallet said after the International Exhibition of 1862:—"In the absence of the sovereign gifts of natural wealth,—prosperity, comfort and power may, by seeking and employing artificially-made channels of industry, be largely developed. Thus it was with the Dutch, once prayed for in English liturgies as 'the poor and distressed States of Holland,' with a bleak and damp climate, and a sterile soil presenting nothing but a flooded bed of sand and silt,—who achieved in the teeth of every disadvantage, the highest mercantile prosperity, a paramount maritime prowess, and became the founders of great and distant colonies."

INSULAR PREJUDICE prompts many others to say: "*Because our neighbours choose to go to school to learn business, need we do the same?*" *Why do they do it?*

In comparing ourselves with others, we must remember that a century ago, the introduction of steam-power gave to England a preponderating advantage. Our possession of beds of coal and of iron ore promised to secure that: but the rest of the world thought it desirable and possible to find in the more genial diffusion of mental power a countervailing agency to our increased material force. Continental philanthropists and patriots urged that "the mind of a nation is more valuable than its soil." Statesmen welcomed the idea with enthusiasm. Humboldt and kindred spirits were appointed ministers of public instruction. Chosen bands,—nay battalions, of teachers were enrolled, and disciplined to do the state the noblest service. It was never supposed that the general ability and the good will of an operative could be multiplied or intensified like the leverage and the steam-power of an engine,—*the contrary was felt;* and a *science of education* arose, as a result of the study of the human being to be educated, no less than of the departments of human knowledge,—yet, out of that study came many divisions and subdivisions of instruction both in universities and in polytechnic institutions.

"*But what,*"—it is continued, "*can be learned of commerce in schools, or anywhere out of a counting-house?*"

The reply is clear. A counting-house is a place in which commercial knowledge must be used rather than sought. Abroad, a youth at school studies the sources of supply for the goods he must hereafter deal in. There he is made acquainted with the laws and conditions of soil and climate, and afterwards brought into contact with specimens of produce in Trade-Museums, from different Trade-Areas; these he is required to examine and describe methodically. He is habituated to scientific nomenclature,—which is suggestive not merely of the natural relationship among things, but of their chemical composition and valuable properties. He learns the "Natural" in contradistinction to the "National" Divisions of Commerce,—the resources of countries, rather than the names of their Ruling Powers. He studies the progress of the Useful Arts everywhere; the Growth and Vicissitudes of Commerce in all ages. From the outset, he is accustomed to a kind and degree of intellectual discipline that must beneficially affect him.

Inquiry is further made, "*Whether Continental Trade-schools are in any way connected with the old Guilds, or with the Government?*" Not necessarily with either! Influential merchants and manufacturers, foreseeing the effects of the dissolution of the Guilds, and of the adoption of "free industry," with its irresponsible action among capitalists as well as its uncontrollable combinations among operatives, bethought them of higher culture as the best means of promoting a good understanding among all parties. "Let us establish," said they, "by the side of the universities, Polytechnic Schools and Technological Institutes. Let us, by means of Art Galleries, Drawing-Schools, Apprenticeship-Schools, Continuation-Schools, Trade-Schools, and Trade Museums, bring the means of living more into harmony with the great ends and aims of life. Let us train head, heart, and hand together. To the study of the Word let us add the Works of God."

No opposition was raised, and there was virtually no attempt made to retain the monopoly of the ancient Guilds, or to resuscitate a single League; yet the discipline that had marked them all, their love of excellence, and their allegiance were reverently preserved.* It was felt that in most departments of industry, except agriculture, "there was periodically a want of some renovating and regulating power."

Government aid was invoked only for inspection and approbation. Here and there Schools of Commerce were warmly encouraged by dispensations from military service in favour of exemplary students.†

Next, it has been asked, "*Whether there is any novelty or speciality in the Continental preparation for business?*"

Nothing, known to me! The canons of instruction in

---

* For details of the transition, see Zschokke's Labour stands on Golden Feet, caps. xix. and xx. G. Philip & Son.

For practical measures, see Das Gewerbewesen im Königreiche Bayern, diesseits des Rheins, München, 1859. Or, Ein gewerbliches Fragenbuch, by Dr. Karl Karmarsch, 1877.

See also Technical Training, by T. Twining, Twickenham.

Education, Scientific, and Technical, by Professor Robert Galloway. London: Trübner & Co.

† Rothschild's *Taschenbuch für Kaufleute*, p. 4.

Commerce, I incline to think, comprise something like the following, for ground-work :—

It has been observed that certain modes of procedure in business recur from generation to generation. These are the unwritten laws—the prescriptive usages of Trade,—to be learned, and understood.

In all transactions, mercantile or otherwise, there is a safe course and an unsafe one, a right course and a wrong one. It is important to adopt the former and avoid the latter.

Good fortune or the reverse cannot be a matter of indifference ; but in business we must trust nothing to luck or chance.

For each legitimate calling there must be due preparation, and for permanence, organisation ; to ensure excellence on the one hand, and to remedy the effects of illegitimate trading on the other.

Every calling in life relates to the mind or the body. Commerce is concerned chiefly with material necessities ; and commercial men are rather men of action than theorists. All theories and speculations need practical tests. "As the downward curve of a rocket or the fall of spray in a fountain, is caused by gravitation, so all flights of fancy or mere surmises, must be subdued by what Bacon calls the wisdom of business."

Where that wisdom of business prevails, commercial pursuits are assuredly not soul-debasing, or injurious in any sense, to any body. There should be no conflict or contempt between merchants and men of learning : for in their highest development they approach each other, like the opposite sides of a pyramid, and culminate in the character of the Statesman, the Consul, or the President of a Chamber of Commerce.

I have very often been asked : "*Why is Commerce called a Science?*" *Why do the French write* "*les Sciences du Commerce*"?

Commerce is a compound word, from "commutatio mercium," meaning, "the *exchange* of merchandise,"—which must be all drawn from one of the three Kingdoms of Nature. It may be "raw produce," as drugs, gems, minerals, wild-fowl, fish, &c., or,—manufactured commodities. Exchange itself, is necessitated by the structure of the globe. "*Non omnis fert omnia tellus.*" It is a characteristic of humanity, and underlies civilisation: "Man alone balances, yet deepens our mutual dependence by the arts of exchange."

Science has been defined: Knowledge of natural laws derived from a knowledge of facts. Theologically expressed, science is simply Man's knowledge of God's ways; which are unalterable, yet mercifully discernible. Thus while we may smile at the expression "Science of Commerce," it nevertheless begins and ends in a study of Nature, and no competent judge doubts the soundness of principles so based. Nor, can any sane man see our supremacy in manufacture and trade challenged in all markets, and our goods as well as our aspirants for mercantile employment at home, beaten by Dutchmen and Germans, without admitting that there must be something of value in the kind of training that accomplishes such things.

What does the "Science of Commerce" comprise in its entirety?

It comprises an acquaintance with Commercial History and Geography; Social and Political Economy; Mercantile Occupations; Goods, in all varieties; Currencies, Weights and Measures; Bullion and Exchanges; Transit and Transport; Insurance and Securities of all sorts; Consular Duties; Chambers of Commerce, &c.

A good commercial man must be an adept in—Correspondence in several languages, General Commercial Law, Accounts, Usages in different countries, International Obligations and Means of Communication.

Why *should Commerce be systematically taught everywhere?*

Because without Commerce industry must be intermittent; crops would not be raised unless a market could be found for them; our farms and our plantations might all be abandoned. Again, of two spots equally favoured by Nature, if one be cultivated and the other not, which redounds most to the credit of human nature and to the glory of God? What else than culture can lead to the full appreciation of the "Earth-Gifts" of Divine Providence, and qualify us to appropriate them everywhere? How else is "the field to become a fruitful garden, and the wilderness to blossom as the rose"?

In 1878, I ventured to say:—"By higher commercial education I do not mean that which leads a youth to look merely for a higher rate of interest on capital, or of profit in business, but, *that which trains him to appreciate fully the objects, advantages, and pleasures of a commercial calling.* Such an education would fit him to compete with all comers; to be prepared to keep faith with everybody; to value justly whatever is valuable; but not to expect uniformity of weight, measure, custom, or opinion throughout the world."

The question has sometimes been asked, *Might not the training of an industrial "university" be prejudicial to business-energy and enterprise?*

I answer, No! it would promote both! Most likely it would rouse the latent ambition of a youth; it would go far to preserve that integrity of soul which scorns a mean action, which maintains credit intact all over the globe, which upholds international morality, law, and liberty. Further—extended and more elevated culture in commercial colleges would promote greater energy and enterprise. It would, as nothing else could, make young men acquainted with the different regions of the globe; it would show the prospects of trade, where industry is rising, where falling, and why. By educating young men together it would raise them, as it were, from the level of solitary anglers to that of systematic fishermen ; it would lead them from dreaming of baits and hooks only, to the study of supply and demand together with all the sciences of commerce.

In manufacture we have advanced from simple tools to combinations of them in machinery ; and so in commerce, we have passed from the scope of individual aptitudes to the range of co-operative intelligence.

JOHN YEATS.

CHEPSTOW, *June,* 1887.

P.S.—In reply to query No. X., I shall be especially gratified if any of my works prove useful to the students who avail themselves of the Commercial Examinations of our Society, and thus promote the aims of our late President, the illustrious Prince Consort, as well as those of H.R.H. the Prince of Wales, his successor, and the founder of the Imperial Institute.

IV.

RECENT AND EXISTING COMMERCE.

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Technical, Industrial, and Trade Education.

RECENT AND EXISTING COMMERCE

With Statistical Supplement

MAPS SHOWING TRADE-AREAS, AND TABULATED LIST OF PLACES IMPORTANT IN BUSINESS OR TRADE.

BY

JOHN YEATS, LL.D.

FELLOW OF THE GEOLOGICAL AND THE STATISTICAL SOCIETIES,
AND TWELVE YEARS EXAMINER IN COMMERCIAL GEOGRAPHY AND HISTORY
TO THE SOCIETY OF ARTS, LONDON.

ASSISTED BY SEVERAL SCIENTIFIC GENTLEMEN.

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1887.

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THE RIGHT HONOURABLE

JOHN BRIGHT, M.P.,

THIS

REVIEW OF BRITISH INDUSTRY AND TRADE,

AND OF OUR

COMMERCIAL POLICY, 1840–87,

WITH

NEW VIEWS OF THE

NATURAL DIVISIONS OF COMMERCE
IN CONTRADISTINCTION TO THE NATIONAL ONES,—
SET FORTH IN TRADE AREAS,—

THUS, ILLUSTRATING

THE *RESOURCES* OF ALL COUNTRIES,

AS WELL AS THE *NAMES OF RULING* POWERS,

IS RESPECTFULLY INSCRIBED, BY

JOHN YEATS,
LL.D. (GLASGOW), F.G.S., F.S.S.

"Commerce has caused the blessings of civilisation to be universally diffused, and the treasures of knowledge and science to be conveyed to the remotest corners. Its humanising influence is, in this respect, most important; while, by making each country depend for the means of supplying a considerable portion of its wants on the assistance of others, it has done more than anything else to remove a host of the most baleful prejudices, and to make mankind regard each other as friends and brothers, and not as enemies. The dread, once so prevalent, of the progress of other nations in wealth and civilisation, is now universally admitted to be as absurd as it is illiberal. While every people ought always to be prepared to resist and avenge any attack upon their independence or their honour, it is not to be doubted that their real prosperity will be best secured by their endeavouring to live at peace. 'A commercial war, whether crowned with victory or branded with defeat, can never prevent another nation from becoming more industrious than you are; and if they are more industrious they will sell cheaper; and consequently your customers will forsake your shop and go to theirs. This will happen though you covered the ocean with fleets, and the land with armies. The soldier may lay waste; the privateer, whether successful or unsuccessful, will make poor; but it is the eternal law of Providence that the hand of the diligent can alone make rich.'"

—*Third edition* TUCKER'S *Four Tracts*, p. 41;
quoted by J. R. M'Culloch.

PREFACE.

THIS volume is entirely new. It contains a brief review of British industry and trade, a survey of our colonial and foreign relations, a retrospect of the commercial policy of 1840–87, and a new Part—*the Natural Divisions of Commerce.* These are based upon similarity of produce and seasons of shipment; and set forth within well-known geographical limits, or *trade-areas.*

The expression 'natural divisions' is adopted from commercial geography, which differs from political in giving precedence to the distribution and the utilisation of raw materials or of goods. It aims at showing a merchant where and when what he wants can best be had, whether corn or cotton, timber or wool; and also where that which he offers is most likely to be introduced to advantage. It helps the shipowner to see what produce is accumulating, and where freights may fairly be expected. Of the importance of such knowledge nothing need be said.

That the natural divisions of trade are liable to the fewest fluctuations, and only to those which affect all traders alike, is known to every man of experience. Grain has to be fetched in due season from the places of growth, cotton from warmer countries, wood from forest-lands, wool from sheep-runs, &c.; the previous state of the weather and other matters determining the time of ingathering. Even where the trade of a district depends less on the collection of produce than on particular processes of manufacture, there will be some regularity in the recurrence of times for transit or transport. Geographically, harvests ripen all the year round; mining and fishing proceed almost day and night; hence ships ought never to be long without cargoes, when awaited, and they would not be so perhaps, were the disturbing influences in the form of hostile tariffs, port charges, &c. fewer and less perplexing.

But the natural divisions do more than indicate localities of production or seasons for distribution; they account partly for the certain utilisation of the earth's yield and for that identity of interest in business which every year becomes closer and stronger throughout the world.

Commerce is largely dependent on, and constantly quickened by the ever-growing requirements of civilisation; and this is developed more favourably in some latitudes than in others. There are natural zones of needs as well as of supplies. In Europe the parallels 40–60° N., and in America 40–50° N. contain the nations, not the most richly endowed by nature, but the most energetic, most enterprising, and therefore most commercial. The inhabitants of the intertropical regions, with unclouded sun and a soil of exuberant fertility, obtain food and warmth so readily that their wants are few and their efforts feeble; hence they remain passive, or for the most part indifferent to trade. They are too rich to be roused.

Calculations have been published, and widely quoted, to the effect that 1000 millions out of a computed total of 1400 millions of human beings are still unacquainted with machine-made clothing or artificial food. Yet trade with such people presupposes a radical change,—a slow process, in their tastes and habits; and beyond that, an equivalent in value for what they may be willing to take from us—which must be still slower and vastly more difficult. Not every consumer or wearer on the face of the globe can, at will, be converted into a customer. Were the whole of our home-population more highly civilised, they would increase their earnings, and with these their disbursements, thus helping to accelerate the movement of capital and invigorate the growth of the arts and sciences.

In Europe, local production can hardly keep pace with consumption, owing to the pressure of population. Yet anxiety about sustenance is dispelled by the abundance and easy transport of food from North and South America, Australia, and India, involving, however, great economic changes amongst us all, especially in agriculture. What will be further effected, by the agency of electricity as well as steam, no man can foresee.

The natural divisions are independent of national ones, but favour international trade—nay, make it inevitable. At present, "the turn-over" of the world's business, and the tonnage of ocean-going steamers as well as that of all other vessels, corresponds closely with the annual extension of lines of railway and the telegraphs. The products of every clime may be found in our markets. The fruits and flowers of the Riviera are delivered daily in Covent Garden, and distributed along the routes of the express trains running between Paris and Bucharest, or Paris and St. Petersburg. Between dates of the issue of invitations to state banquets, and of the occurrence of these festivities, there is time and opportunity now to collect all the delicacies of the day, and to fetch the most welcome guests, from opposite sides of the globe.

In no figurative language, but as plain matter of fact, we may say that the cattle-herdsman or the farmer of the far West is linked to the ivory-trader of the interior of Africa; the fur-hunter of the North with the tea-planter of the Southern shores; the cotton-grower of the Eastern States with the hill-side weavers of Bohemia, and the silk producers of

Bengal or Pegu with the ribbon manufacturers of Basle or Coventry. At the great fairs of Nijnii Novgorod, now, as of old at Tantah in the Egyptian Delta, spices are exchanged for ostrich plumes, pearls for sables, attar of roses for petroleum, or palm-oil for cutlery. The raw material of a woollen garment may have been sent from the slopes of the Himalaya or the plateaus of Thibet; it may have been culled and woven in the Vale of Cashmere; or taken from the llama of the Andes or the Angora goat, and been spun and dyed in Perth. A silken scarf may have started from China, or Burmah, or Hindostan, from the Plains of Persia, or the mulberried Morea,—and been consigned to Lyons, to Paris, or London.

This work contains a newly-compiled list of upwards of one thousand centres of industry and trade, with the comparative percentage of produce of each, its exports, its currency, its nearest sea-port, its internal means of communication by railway or canal, and its approximate distance from London. It further contains Supplementary Tables, which show at a glance the share obtained by the United Kingdom in the commerce of other countries, with percentages of the rise or fall of our trade in every great market.

The volume as a whole, is intended to be a picture of universal industry, in which the most important factors will be found selected as objects for study and comparison. In a certain sense the world's labour is shown territorially—that is, each part on its own soil,—and yet in the proportions due to cosmopolitan interests, or international relations.

J. Y.

Chepstow.

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RECENT AND EXISTING COMMERCE.

BRITISH INDUSTRY AND TRADE AT THE CLOSE OF THE NINETEENTH CENTURY.

INTRODUCTORY.

The United Kingdom, as the leading commercial nation of the world, reflects, in the closing quarter of the nineteenth century, commercial history at large. Though no startling innovation of principle or practice, like that of steam in the work of production and conveyance, has created a new industrial epoch, science has continued its gifts and taken a more active part than ever in economic processes. The period has been one of development, or fruition of principles previously laid down. Intelligence has directed its controlling power over production, by perfecting appliances already possessed, rather than by devising others entirely new. The sum of minor improvements in machinery is, doubtlessly, greater in many instances than the original invention of the machine. Chemical investigations have cheapened processes and rewarded us with new products, destined to take an important share as factors in the promotion and progress of human well-being. Especially has this been the case in the bye-products of coal and gas-tar. Not only has science enriched our lives with mineral extracts, once thought peculiar to the organic kingdoms, such as spirit, burning-oils, dye-stuffs, and flavouring essences, but, with a triumph of research, in the recent production of saccharine, has broken down the supposed immutable barriers between inorganic and organic chemistry. Saccharine is assuming the rank of a commercial commodity, though dear. The new product realises "philosophy in sport made science in earnest," by going to the coal-scuttle instead of to fields of tropical growths for supplies of sweetness. The coal products further prove that mineralised organic substances retain for ages, in a latent state, the properties and powers which they possessed during their vitality, and which only await the intelligence at our command to re-develop, more or less, in their original forms.

Commerce, which takes for its province the distribution of commodities,—raw materials and finished products,—is, in itself, though indirectly, a mighty agent of production, since it stimulates the industry of every clime. Commerce is, directly, based upon productive industry, and grows with its growth. Every new raw material brought within the range of manufacture, every increase in the yield of the soil from improved husbandry, every appliance to make labour-saving machinery more effective, every new process of science to lessen the cost of production, every wise legislative act that clears the path of labour and interchange, every geographical discovery and settlement, every new market in distant parts, and every advance of the labourer in the exercise of the industrial virtues, swells, by so much, the dimensions of the national commerce. By the development of these means, and by their combination, must be measured our recent advances in commercial life. Scarce a division of labour but has felt the influence of beneficial innovation, in the direction of greater abundance and, consequently, greater cheapness of production. Old branches of industry have maintained their vigour and even advanced, although, relatively, gone to the rear in presence of the energetic strides of the most recent divisions of labour.

Agriculture.—Of food substances, corn not only always stands unapproached in importance, but, more than any other commodity, distinguishes the close of the century, with the remarkable transformation of the conditions of the trade. Stimulated by the open market and consuming capacity of England, every corn-growing region on earth competes to supply the endless demand. The golden grain of the Antipodes and California has proved a much richer find than their auriferous reefs, river sands, and blue clay together; and, with the prairie expanses of wheat in the "States," and the resources of our Indian fields of growth, has reduced the Russian "granaries of Europe," with their Black Sea ports, to a stage of minor significance so far as England is concerned.

Amid the vast accession of corn imports, the great market of the United Kingdom, and therefore of the world, has suffered from, on the surface, a paradoxical depression, growing yearly in severity. Its explanation is in the extended facilities of intercourse, another salient feature of the times, through the vast network of electric wires which reticulates land and sea and puts producers and buyers in touch, and the rapidity of transit by the agency of iron and steam. "Mark Lane" has been further prejudiced by the increasing custom of receiving from abroad "bread-stuffs," or flour already milled and barrelled.

The telegraph, however, more than any other agency, has placed the consuming countries of Europe in direct correspondence with the producers of the New World, and, so far, diminished the agency of England for warehousing and holding corn. Our own millers, likewise, have taken advantage of the same facilities, and, to a large extent, have discontinued the custom of buying through the London factors and brokers, opening up instead commercial communication with the great American and colonial growers, and having cargoes consigned at once to themselves.

The altered mode of commercial procedure is one of those numerous cases which empirical devices can neither divert nor arrest without mischief. It is the natural tendency of the trade, from which the community benefits, in the greater abundance and cheapness of bread, while individuals, temporarily, have to bear with decreasing profits or even endure a loss. The sole resource of the capitalist is to shift his capital to more productive enterprise, or so to adapt his administrative skill as to meet the altered conditions and circumstances of his business career. The best legislative service that could be rendered to the shrewd merchants of our Corn Exchange, gifted as they are above the average with intelligence, is to "severely leave them alone."

The fundamental principle of commerce, heretofore laid down and accepted as an axiom, is that any country exchanges its *surplus* produce for the *surplus* produce, respectively, of other countries. Recent advancements in the system of universal interchange ought to rectify this idea. A "surplus" normally implied something over and above the requirements of native consumers; their margin, as it were, not the bulk of the produce. These conditions have completely changed. Only in the sense of the whole produce being "surplus," can we regard in this light the exports from many climes. Cotton, for example, is cultivated in the Southern States exclusively for exchange, native consumption being practically *nil.* The same remark would be correct of wool, sugar, and our chief commercial freights, whether foreign or colonial.

Even in our own country, we do not strictly export our "surplus;" that is, we do not produce for home consumption and then find we have some to spare. On the contrary, we produce expressly for export, with or without regard to home consumption. The course of exchange varies with the times and the demand at home and abroad.

Thus we no longer export but import corn. British industry has encountered during the current half century formidable obstacles to its advancement, from new economic conditions of industrial and commercial life. Within the small area of the United Kingdom it is impossible to produce food enough for the whole community. Reliance, more or less, upon provision from abroad has long been a necessity of the situation.

In order to counteract any detriment to home agricultural industry by the inflow of foreign produce, fiscal restrictions, regulated by the abundance or failure of our own harvests,—that is, upon the price of corn,—were placed upon imports. The burden of taxes on food was made heavier by legislation, which sought for revenue from such sources, as much as to encourage and protect the home-growth of corn.

Though the principle of taxes on food is defended on the ground of their far-reaching incidence, so that no consumer can escape his just contribution, while he can, at will, make it less or greater by thrift in expenditure or indulgence, certain results follow which cannot be escaped or gainsaid.

1st. Fiscal encouragement to a home industry is an artificial device. Whether right or wrong, beneficial or detrimental, it is an interference with the course of both production and consumption, and, whether or not a necessity of time, place, or circumstance, is a breach of the essential law of economy, of freedom to produce and freedom to consume without let or hindrance.

2nd. Encouragement or protection of producers is at the cost of consumers ; the benefit of the few being sought by limiting the enjoyment of the many.

3rd. Increased cost, through taxation of commodities, inevitably diminishes consumption, and, by so much, takes away the incentive to produce. When this applies to the necessaries of life, the "masses," who need more and not less of these necessaries, are mainly affected, and, when scarcity occurs, privation and misery are intensified, creating disaffection and political turbulence.

Such considerations led to the abolition of the Corn Laws and the free entry of food substances. Of two evils, the legislature chose the least ; preferring to throw the farmers upon the resources solely of science and intelligence, rather than see want and discontent among the great body of the people.

The immediate results of the change of policy were—1st, a stimulus given to every corn-growing region of the globe to supply the British market with grain ; and 2nd, unexampled abundance in the country, and permanent cheap bread for the labouring millions. On the other hand, there ensued among the agricultural classes, a struggle for existence which, despite every aid of science and skill to render the soil more productive and farm work more economical, has increased in severity, until rents have materially depreciated, and husbandmen are diverting their capital to other lines of productive industry.

Agriculture has further suffered by the diversion of its ancillary industries, upon which it had always depended for profitable utilisation of the intervals of winter and rainy seasons, when farm-work proper cannot be pursued. The distaff and loom were formerly adjuncts of the homestead as constant as the plough and harrow of the fields. Heckling, spinning, and weaving, were features of farm life even more general than sowing and reaping. Poultry-rearing, and in a few districts especially, the raising of ducks, geese, and turkeys, with incidental sources of profit on eggs, feathers, and quills for pens, were essential to the welfare of husbandmen. Even the labour-saving devices in steam and iron have their counterpoise, in taking the repairs of implements, which profitably filled many spare hours of the labourers, out of their hands. The avocations as distinguished from the vocations of farm life, have been cut off by change of social life, and the problem of the future of British farming cannot be said as yet to be solved. The cloth mills have appropriated the profits of spinning and weaving, without which, even in the best days, agricultural interests could barely have been maintained, and the supply of poultry has been assumed by more favoured states. English agriculture awaits the advent of a far-sighted national benefactor to indicate a path to the revival of its great but drooping interests.

The depression in trade and manufactures, attributed to foreign competition, which the United Kingdom has had to bear towards the close of the century, has not spared the protected countries which are supposed to have reaped a benefit at the cost of England. Continental states and even the United States suffered, throughout, much greater extremes. The inference, therefore, is that other causes were at work to produce industrial stagnation; and amongst these causes, that vaguely fixed upon is generally what is termed "over-production." We must attach a definite meaning to this term. As the very purpose of industrial activity is to produce the necessaries and comforts of life, of which we cannot have too many or too much, it is not easy to admit an over-production or over-abundance.

Fluctuations, however, occur, when a flush of prosperity stimulates production to a degree, not beyond the needs of consumers, but beyond their means of giving value in exchange. Produce then necessarily accumulates; in other words, the supply exceeds the demand, and values fall. Producers, in order to relieve themselves of their stores, meet the means of consumers with lower prices, even to the verge of the bare cost of production. Fluctuations of values are the natural, self-acting process by which supply and demand are always tending to an equilibrium. They perform an important economic function as the governors of production. When the market value of commodities falls below the cost of production, capitalists cease to produce, and shift their capital to more profitable forms of labour. With lessened supplies, the demand remaining as before, values rise, and trade revives; remunerative profits come back to the reduced capital left in any particular industry, and these profits tempt again fresh capital to be invested. No legislation, by statesmen whose acquaintance with industry is scholastic rather than practical, and which must be empirical or artificial, can be "warranted" to act better than this natural law, and by interference, to guarantee producers against loss.

To take a concrete example. A yearly increasing quantity of unsweetened condensed milk is imported into England. The ever-growing consumption of this milk proves that it provides for a real want. Dairy farmers at the same time cry out that their already much depreciated industry will be completely ruined, and pray for government interference to prohibit the importation of cheap milk. We do not want our dairy farmers to be ruined, but we do want cheap milk. What, then, is the remedy? Prohibition loses for us the vital advantage of cheapness. Dairy farmers claim the Utopian right of, say, twopence on every quart of milk consumed, in order to keep their industry alive on the old lines; but, not confident of their cause, put forward, as usual, side issues. Pressing the dangers of using milk the source of which we do not know, which may be from infected cattle, and may be diluted here with impure water, its sale should be restricted on the ground of the public health and safety. Protection to any native industry must be advocated and defended on other and stronger issues, for these are beside the mark. The law knows how to deal with fraud and with food unfit for consumption. The same risks attend the use of English milk. The question is between genuine foreign milk, with the brand of trustworthy purveyors, whose produce stands upon its merits of quality and cheapness, and that of the dearer, if equally excellent, produce of home, which is not always above suspicion. Regarded without the bias of self-interest, it is evident that no tampering with the law of supply and demand can secure for us an abundance of this essential food for young and old, so well as leaving producers to their own shrewd intelligence in seeking their profits. With pastures unsurpassed in green succulence, and cattle the finest existing, it is another paradox that any foreign dairies should undersell our English produce. Every advantage abroad over England is educational, not climatic. While our commerce comprised the earth's bounds, our insularity of character has been maintained as closely as that of our geographical position. So long as industrial enterprise rested on physical energy and vigour, no race approached us in economic power; but as the mental faculties more and more took the place of manual skill and muscular prowess as the chief factors in production, the resources of civilised states approximated nearer to an equality.

Foreign states saw and took advantage of the powers which science placed at their command. With an intelligent desire to increase their national resources and their growth in wealth, which means power; and, inspired by the not unpatriotic determination to over-match and become independent of England, they have bent their efforts, on philosophical lines, to increase their productive faculties. Every civilised state is in advance of England in the industrial and commercial training given to the young. As a case in point, out of a multitude, we select one referred to elsewhere, that of Nottingham, which stands foremost amongst English towns for the means which it has founded for systematic technical teaching. What are the unquestioned results? Within one generation the foreign lace designers, upon whom the local industry was absolutely dependent, have disappeared, their places being filled by the gifted students of the local schools. Nottingham gives practical application to the desire for the encouragement of native talent, and finds the advantage in flourishing manufactures, of greatly improved designs, for which there is an ever-growing demand. Nottingham, at the same time, supplies us with the rational and philosophical course to pursue, in striking contrast to empirical legislative restrictions, in order to meet foreign competition.

The enlightened action which distinguishes the Nottingham manufacturers is the general feature of nearly every continental seat of industry. In Strasbourg, for example, we find a whole system of technical schools, each one of which is so amply equipped with appliances for instruction, both theoretical and practical, as hardly to fall short of the whole of the Nottingham educational arrangements.

The enlightened guiding principles which form the framework of the economic education of the Continent, appear to be contradicted by the universal prevalence of industrial restrictions. Such restrictions are defensible on various grounds, custom, convictions of their beneficence, and the imperative claims of revenue. Just as a despot is the mouthpiece of the will of the race he governs, and proves, in himself, the real littleness of great men,—for no autocrat could stand against a nation in arms,—so statesmen with a scholastic faith in free production and intercourse are unable, and therefore unwilling, in face of national opposition, to reduce their theory to practice. Were it conceivable to make a clean sweep of the work of production, and to start again on a new basis of universal brotherhood, we might imagine an industrial world directing its energies to the various divisions of productive labour favoured by surrounding local conditions, with the view to unrestricted interchange of produce. The world's industry has, however, been built, and will continue to be built, upon separate interests and traditions, which have led to habits and convictions, standing proof for a long while against new economic laws. Patriotic and clear-sighted statesmen legislate for the present. Like surgeons who meet and prescribe for the symptoms as they arise, without seeking the root of disease, they are aware that power exists on sufferance, and prefer to let well alone to exciting antagonism. It is given to few to effect a reversal of national policy such as that of the conversion of the United Kingdom from protective to free-trade principles. Statesmen, urgently requiring revenue to carry on the government, find coadjutors in producers whose industries are protected and whose personal interests are safeguarded the more the higher the dues rise to ward off trespassers on their domain. Prospective and distant national wealth, through conflict with industrial traditions, presents few charms to legislators who desire restful and undisturbed power in a contented state. Beneficial changes, whether industrial, commercial, or political, come only proximately from statesmen; primarily they spring from the solitude of the study and from the philosopher's brain. It is therefore the less remarkable that half a century of British free trade should have failed to convert other nations, and even our own colonies, to a belief in the principle, and that many Englishmen remain unconvinced of its beneficence, while attributing the great growth of our wealth to other and quite different causes, not as a consequence, but in spite, of a free-trade policy.

BRITISH AGRICULTURE.

The depression of British agriculture became very pronounced within the decade of years beginning with 1880. Rents generally tended to decline, and the old eagerness of farmers to seek and take farms gave way, in a great measure, to a like eagerness of landowners to seek and get tenants. The ownership of land and the simplification of the land law, in relation to sale, transfer, and settlement, became more and more questions of urgency, and within measurable reach of practicable legislation. Ireland, almost entirely agricultural, gave so much ground for alarm, that abnormal laws were passed, interfering with freedom of contract between landlord and tenant, and fixing judicial rents, with claims for unexhausted improvements and rights of transfer of holdings.

Many causes combined to bring about this exceptional condition of agricultural industry, which, whether it may be attributed to the change of commercial policy or not, must certainly be traced back to that event as the date of its origin. Agriculture has been influenced by the relative greater advance of manufactures, and the consequent tendency of the rural population to concentrate in the towns—a tendency apparent during the time of the corn laws, but still more evident since. The depletion of labourers has raised the average wages of those remaining, in sight of falling prices, and at an even more rapid rate than the wages of artisans have risen from other circumstances. Education, likewise, has so far spread its benign influence to the agricultural labourers, as to qualify them for the franchise, and, for the first time in history, the legislature has conferred upon them the full political rights of citizenship. Thus we have had the remarkable spectacle presented of the labourers' status being raised and their well-being considerably promoted, in presence of a seemingly failing industry.

The abolition of the Corn Laws by Sir Robert Peel in 1846, was, unquestionably, a turning point in the history of British agriculture, introducing new conditions, the full effect of which was gradual in its development and took a generation to realise. Had it been otherwise, the consequences must have been nationally disastrous. Fortunately, in a sense, time acted as the friend of British agriculture, for, while the free markets of the United Kingdom gave an impulse everywhere to foreign production, the world was unprepared to pour into our ports the amazing treasures of corn which in after years arrived, and the intelligence of home producers was exercised in the interval to adapt their important industry to the new conditions.

Protectionists, so called as members of the Society for the Protection of Agriculture, had strong national as well as personal grounds for opposing the abolition of the Corn Laws, which yielded indeed only to the greater danger of impending famine and insurrection. More weighty even than the argument of the government duty to protect native industry, was the fact that agriculture, the greatest of all industries, had been so long fostered by legal privileges, that lawful interests had grown up, dependent upon these privileges, which could not be abrogated without sending a shock through the whole framework of society. Though such reasoning went rather to show that the previous state of things had been wrong in principle, and that British agriculture left to its natural development would have been in a healthier condition, the disaster of change was felt by the majority to be a less evil than continuance in the same course.

England had not been consistent in agricultural legislation. Without the guidance of economic science, only in modern times formulated into laws, the exigencies of the moment had controlled our statesmen. So early as the middle of the fourteenth century, corn had been imported free, and within a very few years, restrictions were placed upon its entry. Towards the close of the seventeenth century, bounties even were paid upon its importation, and about the same period of the next century, restriction upon imports proved so onerous, that it became of vital moment to the national well-being to relax them. Through the first half of the nineteenth century, the Corn Laws were a burning question both in and out of Parliament. It was a long age of riots and agitation, culminating in the success of the Anti-Corn Law League. Whatever detriment was done to our national husbandry by the radical change of policy, we must admit the striking set-off in the contentment of the masses, who have never since eaten bread "leavened with the sense of injustice." Bread riots have become things of the distant past, cheap and abundant food has tided our poor over periods of depressed labour and wages, and a subject of heated passions has been removed for ever from the arena of parliamentary debate. With the Corn Laws weighted with the double burden of a bounty to the producer and an impost for the purposes of revenue, went also the principle generally of protection to our native manufactures.

Pitted as England has been for half a century, in her course of free production and interchange, without, practically, the power to retrace her steps, against the universal prevalence of protectionist principles abroad, it is of the greatest interest to trace the laws of causation in accounting for the industrial and commercial phenomena of the present age. The first striking feature is that, while every industrial community has made great advances, yet, in the race of wealth, England has, until now, maintained her prestige and advanced at an immeasurably more rapid pace. The effects of opening our ports to the commerce of all nations did not stop at the impulse it gave to the development of foreign and colonial industry. Competition asserted its power as a mighty agent of production, in the stimulus it gave to the improvement of our home industries. As new and newer fields of virgin soil waved with grain in another hemisphere, and in the continental island of the southern seas, our leading agriculturists cast about to make two blades grow where only one blade grew before; to study more systematically the relation of crops to the soil; by scientific appliances of manures and tillage, to draw forth from the soil its richest resources, and by careful selection of seed crops to reach the highest attainable excellence of produce. Science lays down the leading principles for wheat-growers: to select soil of the greatest fertility and to keep it clean; to sow early and sparingly of seed of the best kinds. Wheat does not favour root-crowding, but with autumn "tillering" will develop in the ensuing spring and summer thick, heavy, spear-like stalks. Farmers have not been particular enough in the choice of seed, resting satisfied with ears seldom bearing more than thirty grains. Seed-corn of the highest class of pedigree wheat is also of the greatest first cost. The results, however, justify the outlay, proving it to be the cheapest in the end, and at the same time furnishing a crucial example of the startling value of science applied to practical farm work. One bushel of pedigree goes as far as three bushels of ordinary seed-corn; each grain sends up many more shoots of finer straw, and each ear bears grains of a larger and heavier character, productive of more and finer flour.

Scientific principles applied to potato culture have eradicated the ravages of blight and disease, which, in the absence of the encouraging conditions, seem to have worn themselves out. As Pasteur taught in regard to the silkworm disease, to propagate from none but healthy and untainted grain, our potato-growers have raised new varieties of the esculent by selection, with so much success, that the gravest complaints in flourishing seasons have been of the produce, from its abundance and cheapness, scarcely paying for digging and carriage.

Sewage Farming.—The utilisation of sewage, which for a long while has been an anxious problem, and drew upon us the censure of Liebig, that, as a nation, we ransacked the earth for guano and bones, while we permitted our richest manures to run in waste to the sea—still remains a question in the province of science. In every aspect except financial, sewage farms have realised the predictions of the most sanguine. Economy in the cost of production is, however, not merely an interesting feature but the vital principle of all the operations of husbandry. Sewage farms involve heavy outlay both in their establishment and in maintaining the appliances for their successful working. On the other hand, they avoid the waste of our richest fertilisers and transform our sterile and poorest soils into marvellously productive fields of grain, roots, and green crops, for hay or grazing, cattle rearing or dairy work. The produce of well-managed sewage farms cannot be surpassed in any point of excellence either in quantity or quality.

Under the system of highly selected and improved kinds of seeds and plants, they rival in results the best favoured farms, and, when science indicates, as it promises at an early date, a means to work them at a profit, they must become the distinguishing feature of our future agriculture.

Chairs of Agriculture.—Chairs of Agriculture are now endowed in newly-founded colleges, and a race of agriculturists, with the vigour of youth, have been embued with an enlightened knowledge of the principles of their vocation. The contrast between the high or scientific farming of the second half of the century, and that of the protected husbandry of the first half, amounts to an industrial revolution in every department of agriculture. Economies in husbandry, of labour, time, and method, have increased produce to, perhaps, an equally great extent. Steam, now often employed as the motive force of labour-saving machines, has tended to consolidate small farms into large holdings, to level ditches and hedges into wide fields, and to bring waste lands, which were unremunerative to hand labour, into profitable cultivation. Many thousands of acres have thus been utilised for food produce. By the agency of steam, the husbandman is often enabled to choose his own time for the ingathering of his crops, and avoid risks from changes of the weather. Mowing, turning, and stacking, complete the farmer's haymaking in two days, and, with the expeditious operations on his other crops, he is able to administer a larger capital and to spare time for intervening "catch crops" for winter feed, thus banishing the old system of fallows, and supporting a larger number of sheep and cattle on the farm. Necessity quickened the mind to the fact that a green crop extracted no more from the soil of the mineral food of plants than do the weeds of a fallow. The soluble salts, too, if not taken up by plants, are washed out by the rain and drainage, while by a systematic rotation of crops, each growth may take up its own essentials without disadvantage to the rest.

The method of pedigree selection has been brought to perfection both with regard to crops and cattle. The finest grains of wheat, for example, are reserved for seed, and the finest again from the produce of these seeds, through a series of years, until an excellence of ear is attained, doubling the weight of each grain and the number of grains in the ear. Perfection in cattle has been reached on a similar principle; the pedigree of our finest strains of blood being registered in the Herd Book, corresponding to the Stud Book of our race-horses, whose value is often exceeded by our cattle, from the keen competition existing for them in our colonies and America.

Grain crops, and notably those of wheat, being the main reliance of British farming, are taken as representative of the effects produced upon agriculture generally by the reversed legislation of recent years. Imports of grain have been so large from every quarter, together with "bread-stuffs" or barrelled flour from America, that the fierce competition between native grown and foreign corn has brought down prices to a point lower than what was regarded, in the days of restricted trade, as the "natural value" or the lowest value that would pay for its cultivation. The lowering of values, in the United Kingdom, undoubtedly proceeded faster than the appliances of science could compensate for by increased production. The contrast is very remarkable between Mr. Robinson's Bill of 1815, which provided for free importations when wheat reached 80 shillings a quarter, then thought the limit of privilege, and the state of the markets in 1886, when wheat went below 30 shillings, the lowest point it had ever reached, considering the altered value of money. The contrast is the more striking when we take into account that the grain from abroad is weighted with the heavy charges of thousands of miles of transit, both inland and marine. Only a few years since it was believed that soil, of mere prairie value, could not produce wheat at a profit with such a low range of prices.

Bearing in mind that low price, which means abundance of the necessaries of life, is a blessing to the masses and a service even to the well-to-do, the problem presents itself how to encourage production by the hope of remunerative profits without injury to the consumers. It is evident that when wheat sinks in value to the bare cost of production, it will go out of cultivation to such an extent as to rectify the evil by the operation of natural laws. In England this fact is perceptible in the yearly decreasing growth of the grain. Government might also interpose with restrictions on imports by customs' dues, until the supply diminished and prices rose to their so-thought "natural" level. A return to this system is impracticable in England, and is unwished-for abroad, where the desire is paramount for unfettered freedom to dispose of the produce, and to lay imposts only on imports. Science will also be called upon, through the whole course of cultivation, so to cheapen the cost of production, as even, at the lowest prices yet reached, to leave an encouraging margin of profit. There is no disposition to undervalue scientific processes. Instead of being exhausted by new discoveries, they open wider fields of research, and constitute the main reliance for the future of agriculture. Lastly, wheat failing, it is still left to British husbandry, guided by intelligence, to divert capital and enterprise into lines of production which hold out better promise to industrial skill. Farms are distinguished as arable, or corn-growing; pastoral, or sheep-rearing; grazing, or cattle-rearing; and dairy farms for milk produce, combined or not with butter and cheese, or with either commodity. Such farms get named from their leading produce, though most farms combine, in various proportions, all these divisions of labour. Subsidiary or ancillary farm industries are represented in orchard fruits and in poultry-raising. We have seen in a previous volume,* that the general character of the produce of a farm is determined by local conditions both physical and geological. Thus Ireland and the West of England pre-eminently favour grazing; the line of the Trias, cheese-making; the Vale of Aylesbury, milk and butter; the Chalk, sheep pasture; the Valley of the Thames and East Anglia, corn; while fruit-farming is represented in the cider counties by an abundance of apples, which find an eastern counterpart in the cherry orchards of Kent. While these distinctions mark districts, we note that corn flourishes, if it does not prevail, in the west, and butter is made in the east; that poultry is a characteristic product of Ireland, the Vale of Aylesbury, and of Norfolk, and, like fruit, is found more or less everywhere; that sheep crop the herbage in the grazing lands, and cattle graze on clay farms. Within certain limits these industries are interchangeable, and the failure of any one of them, or partial failure, turns the husbandman's attention to another.

With all the drawbacks from which British farmers suffer, they produce more per acre than in any part of the world besides. When, however, they direct their intelligent energies to the cultivation of roots for cattle, to laying down their corn breadths in grass, or converting arable land into pasture, they are met by the same fierce competition from abroad, which resolves itself into the determination of the foreigner to win British custom at every sacrifice. Our colonies enter into the struggle. New Zealand sends frozen carcases of sheep, over twenty thousand in number, in a single cargo; Australia, millions of tins of preserved fresh meats; America, cargoes of cattle alive or dead. These ever-growing supplies, if they have not absolutely reduced the value of native meats, have checked the rise of value which had set in, from the increase of wealth and improved condition of the labouring classes, and, by so much, have arrested the impetus of greater native production. The amazing produce of corn has been further stimulated by improved means of steam carriage, and consequent rapid transit to our shores; by instantaneous correspondence through the electric telegraph, whereby transactions, half the world asunder, are completed, to and fro, in as few minutes as formerly weeks; and by the distributive powers of great emporiums or depôts, like Chicago, upon which grain converges from the vast prairie expanses of its growth in the States.

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* *Natural History of Raw Materials of Commerce*, vol. i. p. 20 *et seq.*

Similar agencies, hardly second in vastness, facilitate the development of the live and dead meat trade. Chicago, for instance, is as great a depôt for swine as for corn: countless numbers being collected and slaughtered, dry salted or pickled, and despatched as barrelled "provisions" to British ports. Here again, as with corn, the abundance of cheap food to which these resources contribute, is an undeniable blessing to the masses of our labourers, and an important factor in the national well-being. The economic problem of our food supplies becomes, therefore, more complicated. The momentous question is: How, in presence of these supplies from abroad, we may, without legislative interference, encourage and protect our native graziers and sheep-farmers, and, in especial, our Irish provision trade, even as yet unequalled in quality, from decline or ruin?

Dairy farming is called upon to face and, if possible, to surmount difficulties quite as grave. Richer pastures, finer stock, are nowhere to be found than in the United Kingdom, and our climate favours the dairyman. With a dense population, near markets, and an increasing demand, it seems paradoxical that anybody should make better butter and cheese than the people of England and Ireland; that we should import, year by year, larger quantities of these prime products of agricultural industry, and that the best yields of Dorset and Cheshire should be beaten, in our own markets, by the produce of Brittany, Holland, Denmark, and Canada. Such, however, are the facts. Holland has for generations past supplemented the home produce of the dairy, and Dutch cheese had become a household word; but for Brittany to drive the famous yield of the Vale of Aylesbury from the field, and for Canada to enter as the most formidable competitor of the native industry, are entirely new features. At the beginning of the last quarter of the century, Canada *imported* cheese; but, only ten years afterwards, so rapidly had the dairy industry developed, the single province of Ontario manufactured 31,250 tons, and exported to England alone, cheese worth £1,400,000. To a greater or lesser extent, these dairy imports represent a loss all over the kingdom, but especially in Ireland, where the prices ruling for butter have been reducing with such rapidity, as to threaten extinction to a great national industry. For the very highest class of butter and cheese, the United Kingdom maintains its supremacy and realises the best prices, but of this class only a small bulk is made, and while agriculture generally has reached an alarmingly depressed condition, the home production of British and Irish dairies has tended, year by year, to take a second place. Under the circumstances of a failing market, agriculturists prefer to bear the ills they have, and by declining to shift their capital to the production of these prime necessaries of life, they open our ports still wider to importation from abroad.

Let them cast their eyes to the accessory or minor sources of farm profits, fruit-culture, and poultry-rearing, and they are again baffled by a similarity of adverse conditions. Although British poultry would probably carry off the prize in competition with the world, the turkeys, geese, and fowls of Norfolk, as well as the ducks of Aylesbury, approaching perfection; although Ireland rears vast numbers of poultry of every kind, which furnish a threefold profit in eggs, feathers, and flesh; we lean upon Continental resources to fill our markets with cheap poultry and game. Poultry-rearing and the mechanical incubation and feeding of the birds, have attained the rank of skilled arts in France, whence, particularly, we draw, for our home consumption, bewildering numbers of eggs and of domesticated fowls, while the facilities of intercourse supplement the supply from even the distant plains of Hungary and Russia, without taking into account American contributions.

Again, with fruits; our railway termini are fragrant at early morning through the season, with fresh-gathered strawberries from abroad. A profusion of choice ripe fruit, both succulent and dry, from a Continental cornucopia pours out upon our shores. Barrelled American apples roll in upon us until *our* orchard produce becomes a mere item of account. Every fruit of home growth, upon the excellence of which we pride ourselves, finds a representative in cargoes of cheaper foreign productions, until our own growers have accepted the less loss of letting their harvest waste on the trees, in preference to the greater loss of sending their gatherings to market. In the Colonial Exhibition of 1886, fruits as fresh as when picked, oranges amongst the number, were shown from Australia, and enterprise will not rest content, until our tables are supplied with fruits of every clime and season all the year round. Meanwhile, our farmers, urged to compensate themselves for the depreciation of their main produce, by fruit and jam culture, are thwarted in this direction of their industry, and embarrassed by the riches which consumers regard as a boon.

Viewing his interests towards any quarter, the British agriculturist sees danger looming in the distance, magnified though it may be through premature fears. It remains yet to be proved whether the long period of depression and trial means the decadence of the first great national industry of our country, or the premonitory throes of a new birth of a higher order of agriculture. Let us write hopefully, and therefore add, that experts tell us, wisely or foolishly, how signs are not wanting that the whole system of husbandry is in a state of transition; and that the opening of the twentieth century will make an epoch in the history of the arts of production, to compare with the *rénaissance* of mediæval times. While muscle rather than mind directed industry, England held undisputed sway over production and interchange. Now that mind and not muscle plays more and more the leading part, British intelligence is not likely to be less self-assertive in the race for wealth; in other words, for the means of diffusing the blessings of the highest civilisation amongst mankind.

The alternative is not presented to us of becoming a nation of manufacturers, and trusting to exchange with the wide world for our supplies of food, for our agriculture is only representative of the transition that is going on through the whole range of industrial life. Husbandry is itself in the main a course of manufactures. Butter and cheese are direct manufactures, produced by mechanical means; and, by the agency of the vital apparatus of his live stock, the farmer sets himself to produce, from so many pounds of food, in a given time, so much milk, beef, mutton, pork, or fowl. The wail of the producer is heard in every division of industry, that foreign competition has increased, is increasing, and ought to be diminished. The cry is not louder from the manifold producers of our food, than from the producers of our clothing and building materials, our household requisites, metal work, and of commodities like paper and books, that minister to our intellectual wants. Unrestricted interchange offers the best of everything to the consumer. British industry is face to face with the thoroughly skilled and highly organised industry abroad. Illustrations of the fact are to hand from every source. *Ex uno disce omnes.* Citing the graphic words of a recent journalist, who writes with clear insight and strong conviction: "At this hour, in many a French and Belgian factory, and in many a peaceful village nestling beneath the glaciers of the Alps, myriads of hands are at work on shoes for British feet, compensated for their distance from the market by cheap transit, the utmost economy of production, and co-operation between employer and employed. These foreign goods are precisely the makes that require the highest skill and most artistic workmanship, and yield the best profit. Millions of pairs of the finest boots and shoes, that we ought to make at home, come yearly from over the sea; and, if so, why? Manufacturers have long been aware of the fact; a few have made brave efforts to recover lost ground but have been thwarted, and at this moment it is uncertain whether we are not still losing ground."

To draw from the coincidence of dates the inference, that the depression of British industry must be attributed to the policy of free trade, and that the relative progress of foreign competition is owing to the prevailing opposite protective system, is a hasty and unphilosophical induction. The fundamental principles which are working to effect these changes lie deeper. It is necessary that we should investigate the causes which have promoted advancement abroad.

Knowledge of the errors we have committed, as of the influences which have rewarded competitors with success, will establish finger-posts to save us from straying through the morass after will-o'-the-wisps, and, at the same time, guide us again, perhaps, along the path of industrial prosperity. To give up fallacious ideas, like those of the inconsequent effects of high and low wages, is, by so much, to raise the ratio of our correct conceptions. Low wages in Germany give an asserted advantage over our highly-paid labour at home. But wages in America and Australia are higher than in England, and it is in the United States and our colonies that we meet our keenest rivals. The argument thus places us on the horns of a logical dilemma. Besides the difficulty presented of opposite causes producing one and the same effect, the varying rates of wage in different countries are beyond our control; and while we cannot wish that English rates should sink to the Continental level, the levelling up of Continental rates to the English standard can only be the consequence of increased production, that is, relatively, of the further retrogression of British industry.

Attempts have been made to revive British agriculture by introducing new objects of culture.

Tobacco Culture.—One of the most hopeful of these experiments has been that of tobacco. Many varieties of the tobacco plant have been grown, under government sanction, with the view to test those best suited to the climate and soil. Results have been far from unfavourable; but it is easy to foresee that success in such directions can only be temporary and not permanent, since the cultivation is exposed and open to the same fatal competition which has prejudiced the cultivation of other products of the soil. It is in the principles of our agricultural system more than in the objects of culture that recovery has to be sought. Highly beneficial as subsidiary aids, it is not in substituted crops that agriculture can fine salvation. The practicability of tobacco growing in England, and, perhaps, still better in Ireland, has been proved by produce excelling much that is grown in India, and by the experience of over fifty years, in the still higher latitude of Stockholm, where the leaf has been continuously cultivated on the same few fields with satisfactory results.

The agricultural interest has the greatest claims upon the consideration of the legislature, suffering as it does, or it has done, from prohibitions and restrictions of various kinds of produce, which, though defensible on the grounds of morality, unduly penalise the farmer, inasmuch as no legislative counterpart interferes with the manufacturing industries. Whether the Corn Laws were in principle just or unjust, they were the legal enactments of the legislature, the law of the land which the farmers inherited, and for which they were responsible only in the same measure as the rest of the community. It is a constitutional maxim that no citizen or class should be dispossessed of property or rights, conferred by law, without ample compensation, when such dispossession was for the general well-being, and not a forfeit for crime. But the repeal of the Corn Laws fell with more fatal effect upon the farmers than Free Trade upon manufacturers, because agriculture was left handicapped with weights, which were entirely removed from handicraft. Heavy excise imposts remained upon malt and hops, and tobacco culture was prohibited. Let the question of morals justify the drawing of the largest revenue from the constituents of beer and the raw material for smoking, it does not justify the course pursued of leaving the burdens while taking away, without compensation, the privileges of agriculture.

This question of morals has not been decided by shifting the fiscal levy from malt and hops on to beer, in deference to the farmers' representations. Incidentally, too, we may remark that the change has not wholly removed the grievance. Advocacy has not been spared from "farmers' friends," not, it is stated, for a return to protection, but only to a "Customs" duty on foreign malt and hops, leaving the commodities free from "Excise" while granting the farmers a double advantage. Despite the denial, this is *protection;* and is no more and no less defensible than the reintroduction of duties on every kind of grain.

Moral arguments in favour of taxes on fermented beverages and tobacco are greatly supported, in the estimation of Chancellors of the Exchequer, by the easy, though costly, means they provide of an immense revenue. "We drank ourselves out of the Alabama Claims (3 millions sterling) in a year." Nevertheless, convictions are freely expressed, that better agencies than Acts of Parliament exist for the promotion of morality, in the education of the young and in raising the tone of the great body of the people. Doubts are as freely uttered, whether taxation diminishes the vice of intemperance or increases the virtue of sobriety in an appreciable degree; whether, in fine, empirical devices, which attempt to close up the myriad minute outlets of a vice while leaving full play to its founts, can either aid in, or assume the mission which appertains to youthful culture and moral culture. Not more, but better, beverages would be consumed, is the belief of many enlightened abstainers —were every trade restriction removed.

Hampered with legislative restrictions upon beverages, the United Kingdom, posing as the Free Trade propagandist, stands in an unstable position. No amount of argument can persuade France and the other wine countries of the Continent of the sincerity of our principles and convictions, while we lay an embargo upon their chief national productions and at the same time proclaim our trade to be absolutely free. Nor can it be gainsaid, that these states would meet us with more favourable Commercial Treaties, giving our foreign trade another great rebound, were our legislation less one-sided and our practice in correspondence with our principles.

Ensilage.—The adoption of the Ensilage System, as a means to improve farming prospects, is of an even more important character. Ensilage may be described rather as a mode of economising waste produce than as an introduction of new. The ensilage system has, notwithstanding, drawn public attention to the value of some crops, such as the maize and prickly comfrey, to be stored green, which, otherwise, would be unprofitable, from the insufficiency of seasonal heat to ripen. Both are now grown on an increasingly large scale as food for horned cattle, horses, sheep, pigs, and all sorts of poultry.

Apart from the service rendered by the ensilage system in the utilisation for winter fodder, of stubble, bean and pea clearings, with green croppings of various kinds, its greatest benefit to agriculture is, probably, in enabling the farmers of the northern counties to make hay of the aftermath of their grass and clover, large quantities of which are spoiled late in every autumn from failure of sunshine. There would also appear to be a gain by avoiding fallows, and growing winter green crops.

Ensilage seems destined to form a prominent factor in the agricultural systems of the future, yet thinkers must discern that it fails to solve the problem how British agriculture is to be restored to pristine prosperity, and a leading position in the world. We can have no monopoly of any method, and the agricultural states of both hemispheres are abreast, or in advance of us, even in the experimental stage.

In order to arrive at right principles of action, we must see wherein the methods of productive enterprise followed by our rivals differ from our own ; mark well what we are doing in the way of advancement ; and draw inferences from industrial life at home and abroad.

An expansion of a few of the illustrative facts upon which we have already dwelt will, at one and the same time, show how scientific principles, applied in processes and embodied in labour-saving machinery, yield their practical effects on production, and also furnish the means of comparison or contrast between British and foreign modes of labour. Excerpts from the press, which teems with contributions on a subject of such interest, supply valued technical information. One writer points out, in an impressive paper on "Food for the People," the service rendered by the Colonial and Indian Exhibition of 1886, in dispelling the delusion that we are dependent entirely upon *foreign* nations for our supply of food. Our purveyors are mainly, if not exclusively, integral parts of the British empire, our own colonies and dependencies, and the best customers for our home manufactures in exchange ; and, if we include the great United Republic of America, still our flesh and blood : "What," adds the writer, "must be the effect on other places of the rapid extension of wheat growing in India, where there is an unlimited supply of labour? What inducements should be held out to Canada and Australia to cultivate their vast western territories ? What also is to be the future position of the sugar supplies from the West Indies, Australia, Fiji, Natal, and Mauritius, as against the bounty-aided supplies from the Continent? Ought we to continue to expend many millions sterling annually, with foreign countries, for butter and the purchase of live and dead meat, while we possess in Ireland the richest milk-yielding region on earth, and grazing land capable of adding to our available supply of meat, more than enough to enable us to dispense with importations?"

Mr. Tallerman draws the four following conclusions: 1st. Our supply of foods may be derived within the limits of the empire. 2nd. Our home supplies of meat, fish, and fruit, can be greatly increased and utilised. 3rd. The working-classes of the country have a claim to practical information on the subject of our food resources, and the means to utilise them. 4th. Ready means exist for the diffusion of this knowledge, and of the nutritive value of food products, in the many Industrial and Economic Museums now open, also Industrial Exhibitions, which have become a feature of the age.

The food supply of our dense population is a subject of vital importance, and must sooner or later find its solution, though we are still a long way from this desirable result. So soon as a perfect means shall be introduced of transporting meat in a sound condition across the seas, even such valuable inventions as the extract of meat by Liebig's process must be regarded as wasteful, and, so far, unscientific. To condense the juices of an ox into the compass of a small earthenware jar, is akin to burning down a house in order to roast a pig.

Dairy produce strikingly exemplifies the depreciation of British husbandry. Butter has reached a lower price than at any time since the French and Scandinavian butters came so prominently to the front with the enormous influx of butterine. Yet it is within the recollection of the present generation, that the average price of butter was less than half what it now fetches, and its manufacture was then remunerative. The great bulk of butter now consumed is imported; and its general superiority, as well as that of imported cheese, can scarcely be questioned. The complaint of dealers is that British butters are *irregular in* *quality*. In the great Irish market of Cork, for example, there are not less than six varieties, which range in a significant scale of values. Less than half the number of firkins exported to England weekly are "superfines" and "firsts," the rest descending in quality and rising in quantity to "fourths" and "fifths." Buyers recognise no such distinctions in the all-round and fairly uniform butters of Holland, Brittany, and Canada, knowing that these latter "makes" suffer for the inferior. Like the Irish butter still, it is not long since Canadian butter was made at each farmstead, with every grade of care, or negligence, with the net result that a small portion was excellent, a certain quantity middling, the bulk graduating downwards to very inferior; and the export demand for the produce comparatively *nil*. Since then co-operative dairying has been started, under the auspices of the government and the supervision of the Ontario Agricultural College. The farmers of a district send their milk to a "creamery," where it is treated by skilled hands, with the best machinery, the butter produced being of a uniformly high quality, for which the farmer receives a better price and the public a better article.

Professor Robertson of the Ontario College shows how strictly scientific principles and art in butter-making can be and are applied by the colonists in the Dominion.

In the United Kingdom and France butter is made in shallow vessels at a warm temperature, and soon ripens, therefore soon spoils, an excess of salt being necessary to prevent it from turning rancid. Canadian butter is made in deep cases, sunk in cold water, and keeps fresh for weeks, or, packed in air-tight tins, for a year. English and Irish farmers must find it hard to compete with the skilled and organised industry of Canada so long as they keep to the old world and world-old processes. Co-operative production is quite as possible at home as abroad, and eminent men are leading to its adoption, to restore to butter-making its erst-while profitable features.

British and Irish dairy farmers complain that they are further injured by the competition of sham or bosch butters, the oleomargarines and butterines. These substances are preparations of animal fat, and form about a third of the imports. Most of it is shipped from the United States to Holland and Denmark, where it is manipulated with the produce of the cow and sent to Cork as "thirds," "fourths," and "fifths." Much of it is retailed nefariously, and above its value, for genuine butter, a fraud within the province of the law. Apart from the law for actual fraud, the farmers' remedy is self-suggestive. Let it be observed that in America, which country is the source of the spurious article, bosch is never consumed, but only prepared for export. It is unknown in Canada, being kept out by a protective tariff. Bosch is only a substitute for inferior butters, and never mistaken for the best kinds. Factory-made butter, such as the Americans eat, is uniformly good and cheap, against which butterine has no chance.

Factory production, however, requires scientific knowledge and technical skill. We are thus forced back again, as in every direction of our inquiries, upon the necessity of the improved industrial training of our producers, through systematic technical instruction in youth, as the only course open to us to maintain a place in the field of production. Every "creamery" in Ontario is a school of technical instruction; and it will be wiser of our dairy farmers to take a lesson from abroad, and put their own shoulders to the wheel, than to call upon Hercules in the shape of arbitrary and artificial government restrictions, their delusive resource against falling wages and decaying trade.

British Hops.—The commercial history of British hops is replete with varied, interesting, and instructive phenomena for the student desirous of arriving at principles from the facts of economic science. No crop is more capricious in its yield. No growers are more persistently downcast at their prospects or louder in gloomy forebodings of foreign competition. A good year of hops produces half a million cwts., and half as much more is imported from abroad. Exceptionally good years have produced over three-quarters of a million cwts., and imports have been arrested. Exceptionally bad years the harvest has dwindled to one hundred thousand cwts. and even been threatened with utter failure, when imports have redressed the balance and taken the first place. The caprice of yield affects foreign as much as English growths: an abundant hop harvest in our own country often meeting a set-off in dearth abroad, and the converse. The chief foreign sources of hops on the Continent are Germany, Russia, France, Belgium, and Holland. We receive hops also from America, and some fine parcels have arrived from Australia. The average English growth per acre is a little under 8 cwts., which compares favourably with German, Russian, and French of 5½ cwts., American, 6½ cwts., and not unfavourably with that of Holland and Belgium, of 8 to 9 cwts. A season of blight befel the crop in 1882, and the value of hops rose to the phenomenal rate of £35 per cwt. In 1886 the crop was one of the heaviest known, exceeding any for more than twenty-five years, the average being 10 cwts. an acre, and the best croppers reaching 15 cwts. In the same year a short crop was gathered on the Continent, and American produce was blighted. During the long trade depression, of which this year formed a part, hops were less in demand, owing to a diminished quantity of beer being consumed, as a consequence of bad times and want of means, as well as of the spread of temperance principles amongst the beerdrinking labouring people. The superabundance of home growths, following on a fairly favourable previous year, relieved the growers from foreign competition, but brought down current prices more "ridiculously low," as described, than had been known since British hops had been freed from Excise dues and foreign from Customs a quarter of a century before. Current prices ranged according to quality, from £2 to £5, 10s. per cwt. for English hops, £4 to £5 American, £1, 10s. to £4 Bavarian, £2 to £3 French, and £1, 10s. to £2, 2s. Dutch.

Such extreme and startling contrasts to £35 in 1882 bewilder growers. Their case, as put before the Royal Commission on Depression in Trade by the representatives of the farmers' clubs of Kent and Sussex, in which counties two-thirds of our English hops are cultivated, is that, taking into consideration the onerous prime outlay in hop cultivation, an average over £5 per cwt. must be realised on the crop before a hop farmer's profit commences. They added, that, if the depression in the market continues, it will be impossible for planters to go on, and they point out the loss to the community which would result.

There are special features in the hop trade which enhance its interest as an economic study. Beyond fiscal traditions which abide by the industry, growers are subject to an exceptional impost of extraordinary tithe, of 9s. to 15s. on every acre of hop land. A trade custom, the relic of protectionist times, requires the packer, under a penalty of £20, to mark every bale or pocket with the name of the parish, the date, and the weight, not as a guarantee of quality or kind, but merely of the place of growth. Farmers are a by-word for grumbling, and hop farmers stand at the head of the art. They complained, with a bitterness not exceeded by that of their hops, of their heavy imposts in protectionist days, when Chancellors of the Exchequer forecast the annual dues at a venture, that no respect was paid to the caprice of the crops. In the time of dearth and high prices, they raised an outcry that the plants were showing hereditary maladies and going out of cultivation, and that brewers were learning to do without them, using a variety of substitutes. When relieved from fiscal imposts, fair seasons revived complaints that foreigners shared the profits of native industry; and again, when profusion rewarded the growers, that cheapness made the hops worthless to gather.

In one respect, which constitutes another crying plaint of the hop interest, the conservatism of old customs has been rudely disturbed. German competition has taken away the Irish trade from London and broken through a virtual monopoly. Every year, German travellers arrive in this country, show their samples, book orders, and secure a large business, underselling home growths, without any of the responsibilities of citizenship. German firms have located themselves in the very home of the wholesale trade.

Growers attribute their losses, real or imaginary, and the increasing depression of trade, to causes beyond their own control. First in importance is foreign competition, enhanced by the latitude allowed to importers of plain bales; so that only experts can distinguish Belgian or Dutch hops from Bavarian and French, and country brewers are thereby defrauded by unscrupulous dealers. Foreign hops are not packed as picked, but are collected by itinerant buyers, from farm to farm, like Russian bristles and rags. They are afterwards blended, and, as a consequence, do not possess the uniform quality of the English bale. This seems a somewhat inconsequent complaint, since, without quality being maintained, the decried foreign trade must fail. A final valid grievance, shared with other agriculturists, is that, for occult reasons, railway carriage favours foreign produce in preference to home growths, so that Bavarian hops can reach the London market at a less cost of carriage than the "Goldings" of Kent.

When we come to the remedies proposed to arrest the decadence and revive the industry of English hop culture, a reticence is betrayed by the growers, who, being chiefly interested, ought to see their way more clearly than Government or others, betokening a lack of faith in the strength of their case. The local Chambers of Agriculture, as though fearing to put the hop-growing interests in the foreground, pass general resolutions that the depression which prevails in commercial and agricultural affairs claims an immediate alteration in our fiscal system. The most that the growers press for is that "an Act shall be passed prohibiting the landing of every bale of foreign hops which is not sealed by the authorities of the district in which they are grown, with a certificate that they were grown in the particular district, and that the date of growth is correct."

Thoughtful outsiders cannot discern in these puerilities any benefit to the hop industry. "Alteration of our fiscal system" has no other meaning than to retrace our steps towards restrictive trade, a course which is not within measurable distance of practical politics. The feeling is universally in favour of an equable distribution among all races of the fruits of the earth.

The uniform marking of foreign parcels is an equally impracticable device, and, if practicable, useless. The regulation with regard to English bales is itself called in question; for quality, not the locality, in the long run, commands the market. Anxiety for the consumer, read between the lines, means privilege for the producer. Government could not impose upon countries so wide apart and different in manners and customs, one set mode of packing; and on the Continent there could be, at the best, from the itinerant collection of small parcels, only the brand of the depôt to which they converge and not of dispersed districts of growth. The practice of mixing produce would not be touched—a practice which, if bad, may be left to court its own failure, and, if good, is open to English growers to copy. Again we must lay it down that fraud is not commerce, is outside the argument, and to be dealt with by the criminal law. The question of home *versus* foreign supplies is inconsequently reasoned on the side issue of quality, still more so when the foreign produce is charged with inferiority. The commercial question assumes trustworthy dealings, and the best means to meet the consumers' demands, without implied rights or privileges on either hand.

Some of the statements of the hop-growers are likewise open to refutation. During the dearth of hops prices rose to four or five times the average, and six or seven times the lowest values as yet reached. High-priced hops means the enrichment of the grower at the expense of the brewer, but the public also suffers. The plaint of the growers at this period, with such rich compensation for scanty markets, was that their industry was moribund and hops were going out of cultivation. Consideration for the brewers and the public was as scanty as their crops. When a season of overwhelming abundance befel and prices went down to their lowest point, the growers put forward the plea that an average value had to be reached of over £5 per cwt. before the cultivators' profit began. They did not, by any oversight, enfeeble their argument with the fact that every acre in these years produced twice and, in favoured instances, three times the occasional weight of hops.

Competent authorities are not slow to assert that the hop farmers have themselves to thank as the main cause of the untoward condition of their industry. Facts in a great measure support the assertion. The finest English hops are unsurpassed in the world for every admired property, and fetch the highest prices in the market. Foreign hops, as with the oleomargarines in the butter trade, compete only with the inferior produce. Why not then cultivate solely the finest qualities of hops? The reply given is that growers have neglected quality and gone in for quantity. The temptation to make early profits of "Prolifics"—which "ripen soon, are heavy croppers, and sell well at the opening of the season, but rank low in respect of aroma, condition, and brilliancy"—has proved too much for the grower who, in a great degree, throws over the renowned "Goldings," which yield less abundantly without selling at a correspondingly advanced price. Thus a door has been opened to the foreigner, who could not hope to rival the "Goldings," but can compete on equal, if not better, terms in growths of second and lower qualities; and, so far as strength goes in lieu of delicacy of flavour, Bavarian and American hops beat the average run of English growths.

The system of marking the pockets defining localities of growth without guaranteeing quality, while changes have taken place in the variety of hops cultivated, has really been trading on a good name, with the inevitable eventual result of declining trade. Kent was formerly resorted to for "Goldings," because they could not be got elsewhere. Now they are displaced by varieties which leave buyers to pick and choose in any quarter, at home or abroad: the Kentish trade has gone out into all lands and buyers to the end of the world.

Every attempt we have made to elucidate industrial principles, taking our facts and examples from the great divisions of agriculture, brings us irresistibly to the same conclusion. Our investigations into British hop culture form no exception, but enforce the truth that it is not to arbitrary and empirical or artificial privileges we must trust to revive our industry and commerce, but to better teaching and training of our young producers; to better cultivation of the mind as well as the soil; to better technical knowledge, and clearer insight into the nature of the crops we raise; the physical conditions that favour their growth, and the scientific principles applied to culture, which give the highest industrial results. Hop culture has been saved to our country by the same progress in scientific manuring as in other farm crops. If the farmers only adopt the plan of giving the bines suitable food, and return to the cultivation of the finest varieties of the plant, for which our climate and soil are so eminently fitted, they may still defy the world's competition; and though they may not make so much profit at first, they will get back their good name and, with it, the confidence of the brewers, and, above all, they will enjoy the satisfaction of knowing that the restoration of prosperous days will be due exclusively to their own enlightened exertions. Handicapped heavily at the start by the extreme cost of the preliminaries in planting out their hop-gardens, one of the most expensive branches of agricultural labour, hop-growers possess the grand countervailing advantage in that the work is done once for all, spreading over many years, and the crop, perennially in the ground as with our orchards, awaits only the annual ingathering of the fruits; where, on other farms, an annual ploughing and sowing is the first essential to the harvest.

BRITISH MANUFACTURES.

There is a oneness of interest in the industries dependent upon the cultivation of the soil which enables us to investigate the subject of agriculture as a whole, a course which, from the manifold diversities both of objects and processes, does not appertain to our manufactures. Nevertheless, when probed to the centre, a correlation of economic, that is natural laws, is arrived at, which connects the two grand divisions of human industry and enterprise in as close and perfect an inter-dependence as the members of a vital organism. When agriculture suffers, manufactures suffer, and the converse is equally apparent. We need not to inquire exhaustively into the progress or retrogression of our manufactures during the period under review, since any one of them will exemplify our principles and practice, and furnish facts upon which we can base our conclusions. With manufactures, as with agriculture, the century closes with wailings that the glory is departed, blended with the optimist belief of many that there is no ground for apprehension, much less alarm. Manufacturers' fears take the form of distrust of the wonderful industrial and commercial strides taken of late by our continental neighbours and rivals, both in production and interchange. The undoubted facts are that every civilised state has taken more than heretofore to produce manufactured commodities for itself, for which it was before more or less dependent upon British enterprise, and has even begun largely to export to the United Kingdom products of industry, skill, and intelligence, the supply of which we had learnt to regard as our own insular privilege.

The advance in wealth of our neighbours is, nevertheless, not an evil to be deplored and thwarted, but a blessing to be promoted. With wealth comes the sense of responsibility; and responsibility is a guarantee and safeguard of the peace which industry requires in order to flourish. Demand, in its economic sense, implies having value to give in exchange. It follows, therefore, as an axiom, that the greatest trade is between the wealthiest countries, and expands as their wealth increases. The phenomena of commercial life confirm these truths.

Wherever Continental nations are encroaching on English industrial pursuits an acknowledgment of our supremacy becomes involved, since their advancement is through the all but universal employment of English machinery guided by skilled English workmen. The Report of the Commissioners on Technical Education carries the conviction, that English artisans, in almost every department of industry, are still superior to their Continental competitors. The theory of British exclusive rights of manufacture can only be maintained by being open to assault from all quarters. Our only right is to excel and drive competitors from the field; and co-ordinate rights are enjoyed by every industrial state. The extreme right of our industrial army, shared by our military defenders, is not to know when they are beaten.

British manufactures are fed both from native and foreign resources. Raw materials from abroad are equally at the disposal of competitive states; but our mines of coal and iron are possessions of which we cannot be deprived. Were we to import coal, there would be occasion for grave alarm. Not the dread of imports, but of diminished exports, now extending to every civilised race on the earth, moves our merchants' minds. Similarly, in its degree, with iron. We may import Swedish metal and the native steel of Styria, both of special quality, without remark; but the introduction of hardware from abroad, of Belgian nails and railway plant, is not to the credit of our productive powers, and claims the national reflection; a phenomenon to be removed rather than feared.

The fear of an excess of imports over exports arises from a delusion, common abroad as well as at home, that the wealth of a state must diminish and even die out, where more is bought than sold. Facts do not uphold this view. Only wealthy countries, growing wealthier every year, import more than they export, and of this practice England is the chief example. There must be a drain of specie, it is thought, to redress the balance. Observation shows, however, that specie flows the opposite way, and that England, far the wealthiest country on earth, grows yearly wealthier, receiving specie as well as goods in excess. Russia, on the other hand, exports much in excess of her imports, yet her trade relatively declines, and more gold leaves than enters the empire. The same phenomenon presents itself in poor countries generally. How explain the paradox?

In the first place, the statistics of external trade are rather delusive. Any freight leaving a port is entered among the exports, although the cargo may be lost at sea; but a freight, bound for the same port, if lost on the passage, has no record in the statistics of imports. Again, a vessel leaving port, chartered with merchandise to the value of £200, returns with goods valued at £250; a clear case of imports exceeding export, and at £50 profit.

The point at issue, rendered simpler by reviewing the course of trade of any *one* country, since what is true of one is true of all, is open to easy demonstration. Thus, British imports exceed exports. We buy more than we sell, and the balance of trade, apparently, is against the United Kingdom. But commercial interchange is a system of equivalents, that is, of give and take. So far as specie or bullion enters into our transactions, it ranks merely as a commodity with other merchandise, and the balance is thereby redressed between imports and exports.

Either money passes or it does not pass. If we buy more than we sell, that is, if we import more than we export, while money does not pass, the only solutions are,—1st, That we make good bargains, get more in return than we give, and reap large profits, the very end and aim of trading. 2nd. That the excess of imports is *owed* to England, and represents interest on loans contracted in this country, and paid in *kind* instead of specie. 3rd. That the excess of imports is compounded of both factors, merchants' profits and interest on loans. These solutions of the problem are all-sufficient to explain how England increases in wealth, while the balance of trade seems always against her, and the annual commercial "Returns" verify the facts, both with regard to merchandise and specie.

In effect, the same principle obtains in retail trade as in foreign commerce. The petty tradesman buys more than he sells. He stocks his stores, with thought of replacing his stock-in-trade with increase. By his energy and business judgment, he continually extends the area of his dealings, in other words, buys in larger quantities, not in alarm but confidence, while also subsisting upon the proceeds.

In spite of all the advantages enjoyed by Continental countries from their technical training, cheap labour, freedom from interference by trade unions, from restrictions also as to hours of working, and the employment of women and children, the vitals of the English people have not been sapped, their physique has not been ruined, and the English operative is about as strong a labourer as can be found in the whole world. England holds her own because her children are better fed and better developed than those of any other country, and because they inherit a special aptitude, which other races have to acquire, for certain industrial divisions of labour.

Trade Guilds.—A special feature of Continental industry is observed in the influence exercised by Trade Guilds, whose authority remains almost unimpaired from the Middle Ages. Each town and each craft or mystery has its own guild, which, with some of the evils of a "close corporation," the perpetuation of industrial *castes*, and tenacious pursuit of class interests, still fosters an *esprit de* *corps*, a good fellowship, among its members, from the "Grand Master" to the humblest grade of apprentice; tends to an hereditary aptitude in families, where the industrial masterpieces of the past are heirlooms to stimulate the present, and incites to a common and constant emulation and striving after excellence. Loyal to their order, every member, whether noviciate or free, is inspired with the desire to stand well with his brotherhood, which can only be achieved by merit. The apprentice is encouraged by the hope of rising to the highest grades of his guild, and the chief officers are considerate from the remembrance of their own probationary service. Under these industrial conditions, the antagonism between capital and labour, so fertile a source of evil in England, holds small place, and the whole body works for the pre-eminence of the craft.

England has outlived Trade Guilds. Our rich City Companies represent, only in name, the industries by which they are designated. The munificent encouragement which some of them have given, in recent years, to technical training, and to their own nominal industries in particular, has been a purely voluntary act. We rather pride ourselves upon our advancement in that the trade guilds have done their work and seen their day. The desire obtains, not to resuscitate their powers or increase their usefulness, but to appropriate and divert their property to public purposes.

The altered status of the trade guilds is, doubtless, a phenomenon presented in the course of our industrial evolution. In the interim, nevertheless, we have to bear with the errors, evils, and unstable convictions of a state of transition, to which the sufferings attendant upon the supercession of handicraft by steam machinery affords the nearest parallel. The severance of the interests of employers and employed, masters and men, capital and labour, is the feature of gravest import. Masters cling to privilege and restrictions; "hands," as they have come to be called, unfortunately, claim "natural rights." Both combine for mutual support, and we name as hopeful fruit of the combinations amongst the working classes the development of the co-operative principle—a principle which promises to play a prominent part in the future field of production. No sooner did labourers combine their reserves of earnings in a common fund, and assume the character of operative capitalists, than a new incentive was given to their productive powers, and they were quick to discern that capital is not antagonistic to labour, but the first requisite of its success.

The system of co-operation has spread considerably in many branches of industry and in many forms. In some instances, operatives have started co-operative mills and factories, entirely their own. More frequently, capitalists have opened a way for their "hands" to a share in the profits of production, by investing their savings as *protected* shareholders, taking part in the profits but secured from liability. However arranged, the influence is good. Operatives learn to practise the virtue of thrift, to discern the value of administrative skill, and to aspire to excellence of workmanship, for inferior work means loss. Capital and labour are again in union; and, while the restraints of the trades' guilds have disappeared, an industrial fellowship is re-established, founded upon good faith, intelligence, and freedom. Such seem to be the tendencies of the "phenomena of industrial life;" to reach their fruition in the opening century, and to which reflective minds may wish "God speed."

Coming to an illustrative example of failing trade, "there is nothing like leather." Reference has been made to the fact, proved by the published trade returns, that millions of pairs of boots and shoes are yearly imported into

England from Switzerland and France. Notwithstanding this feature, which is only of recent development, the leather industry has more than doubled during the period of our inquiry, and our colonial exports of boots and shoes are of vast dimensions. Our retrogression is, therefore, relative and not actual.

The cordwainer's art takes a leading place in the transformations which industrial methods have undergone through the introduction of labour-saving machinery, and the application of scientific principles to the work of production. The solitary home craftsman sitting on his stool has given way to the factory worker, standing healthfully at his bench, in a community of hands, and his labour has been raised to the rank of a highly skilled art. The sewing machine and the magnetic hammer for riveting and nailing, have disposed of manual labour, and mechanical appliances spare the labourer from the subsidiary operations of cutting and shaping. Here we appear to have the elements of industrial success; the application of principles which distinguishes recent forms of industry from old handicraft. Where then can we look for improvement if these principles fail? We want to know how the humble race of the sterile Swiss mountains can enter the field against us. We want to find the weak points of home manufacture, as the first step towards providing a remedy.

Continental wages can have an inappreciable effect on the trade, since the rapid production by machinery and the factory system leaves the wage for each boot and shoe in the cost of production an item of very small account. English manufacturers trace the causes to minor, easily preventable circumstances. The industry is still fettered with artificial restrictions and capricious rules. Trade unions enforce the same rates for piece work at home and at the factory, without taking into account the capital invested in the plant of a large establishment, from which men as well as masters benefit, in the greater productiveness of skilled labour. It is in this wholesale and economical execution of the highest class of work that foreigners have excelled us. Where our trade unions and employers come into collision, with a consequent want of system and frequent change of hands, the workpeople abroad grow up from childhood in the same employ, sure of work as long as they do their duty, and knowing that their interests are never forgotten. Hands are employed year after year on the same work, for no one willingly leaves his firm, and the result is that, so far as possible, perfection of finish is attained.

Opposition to the factory system, while the tendency of the age is towards wholesale production, has to linger in types and relics of handicraft among men who really make boots and shoes throughout, and struggle to prove that there is some occult excellence in hand-made goods.

Besides the shoemaker proper, there is the laster, finisher, or machinist, who also works at home, who never actually makes a shoe, but finishes off dozens every week for any large employer. Isolated labour cannot compete with that which is scientifically combined, classified, and organised. Workmen in the large factories, each in his limited department, but under one roof, and paid by the piece, are jealously gibed at by the all-round lonely maker, as themselves machines. But those may laugh who win. Socially, factory-work is an improvement rather than a deterioration, for the hours are regular and shorter; and the less of a workshop a man's abode, the more it is a home.

As the effect of the more minute division of labour is to extinguish the "self-contained" boot or shoemaker, so also the old class of apprentices to whom he taught the art and mysteries of his craft must find their occupation gone; no longer learning to select their leather, cut it to advantage, and build up the shoe, oftentimes, it must be admitted, in anatomical defiance of the foot.

The demand for foreign boots and shoes, says an authority, is due more to fitting and finish than to anything else. The material is neither better nor worse than that used in England. The fit, again, depends upon the last on which the boot is framed. Little variation has taken place for many years in English lasts, which are made by professed last-makers, gauging their work mainly by sight, while abroad they are made as a division of factory labour, to exact measurements up to the hundredth part of an inch. Lastly, we must fain admit that, lying at the foundation of the success of Continental competitive enterprise, not in cordwainery solely, but in every division of manufacturing industry, has been the encouragement given to technical instruction by the trade companies and hand-worker societies of Germany, the chambers of commerce and industrial societies of France, and the kindred institutions of other states.

Happily the force of such considerations is telling upon the leaders of British industry and commerce. There is reviving something of the spirit which animated our trade guilds of earlier times. Chambers of commerce are exercising their influence in the establishment of technical museums and in their guidance and encouragement of school work. Everywhere the conductors of our commercial and industrial enterprise are taking a larger and more active share in the educational work that has so direct a bearing upon our national prosperity. The ancient Corporation of London, with wise munificence, is founding commercial centres of instruction, and giving earnest heed to the signs of the times. The great City Guilds are awaking to their duty, and, by the liberality and wisdom which long ago established our staple trades, will prove equally efficient in their maintenance and extension. The Turners' Company, by their annual exhibition of the masterpieces of carving and turnery, as well as by the agency of prizes and not less valued diplomas of their Company's Freedom, have inspired many aspirants in a beautiful art to achieve an honoured record on the roll of genius, diligence, and skill. The Goldsmiths richly encourage art in the precious metals; and the wealthy companies generally, by their schools and liberal contributions to the Corporation educational projects, realise the vital importance of the industrial problem we are called upon to solve, as well as a right conviction of what is required to meet its conditions.

Let us observe how theory is reduced to practice by a further illustration from the leather trade. The Worshipful Company of Leather-Sellers, the Boot and Shoemakers' Association, and the Leather Trades Protection Society, to which last institution the credit belongs of healing many of the disputes between employers and employed, have combined "to promote the interests of the leather, and boot and shoe trades, by the diffusion of practical or technical knowledge." By the acquisition of special knowledge and improvement of skill, employers and employed will both be benefited and the trade be better qualified to cope with foreign competition. This is taking the rational view of empiricism. The masters do not say to their workpeople that they must work for less wages in order to drive the Swiss and French away, but put forward the common-sense plea—"We must have better work. We are beaten in quality, finish, and style, in artistic workmanship as well as in artistic production; and we don't mean to be. We want more intelligence in the making of boots and shoes, more taste, craftsmen with more pride in their calling."

Instruction is given in the natural history of the raw materials; the chemistry of tanning; the structure and use of tools; and the anatomy and physiology of the foot, normal and abnormal. Judiciously bearing in mind that intelligence gained from general knowledge aids materially in every separate division of an art, students are encouraged to enter for a complete course of instruction in any one limited subject. The programme means that a skilled industry is to be put on a scientific, artistic, and commercial basis; and the moral that lies beneath is, that the way to improve our shoes is to better the shoemaker. Turn the clicker, the machinist, the laster, and the finisher, into intelligent artistic workers, and a social, moral, and industrial reform will ensue, bringing back prosperity to a native industry, and, as with the Nottingham lace-workers, redeeming it from dependence upon foreign skill.

Enlightened teaching of this nature strikes with the force of conviction as the right course to pursue. Yet there are not wanting eminent authorities to warn us from expecting too much from such agency. "For foremen, overseers, managers, fitters, and operatives engaged in special branches of work, such as chemical manufactures," said they, "technical education was invaluable and essential, but for the great mass of artisans it was of quite secondary importance. To the skill of an Oldham mill-hand, engaged in twisting a cotton thread, technical education could add nothing." Another exclaimed: "Of far more importance than technical education is it for England to see that the rising generation is not physically enfeebled by over-pressure, and is not tied down to books and slates when it should be exercising that manual dexterity, which, if not acquired when the nerve-centres are evolving, can never be subsequently attained." *

Emphatically true though it be that development of

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* Sir J. Crichton Brown, Kt., F.R.S., Goldsmiths' Hall, 20th October 1886.

muscle is of vital importance, and that undue mental strain is a fatal error, there is no reason for muscular and mental training to come into conflict. It may be, and probably is, too true that school-life needs to be diversified with far more robust physical exercise and unfettered play. The argument therefrom does not, however, touch the fringe of the subject of technical education, and is both inconclusive and unconvincing. Such reasoning would gain in force if our foremen, overseers, managers, and fitters, were born to their office, or we copied ancient Egypt in hereditary industrial castes, from which there was no escape. Our foremen and leaders, and even employers, rise from the ranks; but they would wait in vain for "technics" to come to them as a consequence of their promotion. The Oldham mill-hand would be none less skilful a spinner and all the more intelligent a labourer, from technical knowledge, with vastly better chances of a foreman's place. A labourer's industry claims, like the state, the development of his full faculties and capacity. Any hindrance to complete development is an educational wrong. Few can be commanders in the industrial army, but technical education should be a marshall's *bâton* in the knapsack of the rank and file. Intelligence is the prime mover among the productive powers. It cannot admit of doubt or question that with our industrial classes equipped with technical knowledge, and inspired with the intelligence that comes therefrom—in other words, if all our labourers, though not foremen, were fitted to be such—the production of wealth would immensely increase. The might of the German army owes as much to the intelligence and sense of individual responsibility among its component parts, as to the rigour of its martial discipline or the courage of the troops.

Technical education, in the most comprehensive sense, comprises industrial science as well as art; the theory or principles as well as practice of productive labour, and begins with the lessons of our earliest years, as a systematic and continuous course in the common things concerning the affairs of our daily working lives. Such instruction is designed to train the young to thoughtfulness and intelligence; to inspire zeal in the pursuit of useful information, and to encourage a love of knowledge for its own sake, making the art of reading itself auxiliary from the new fields it opens to youthful inquiry. These purposes are sought in our infants' schools by object-teaching. Children are led thereby to observe, handle, and examine the actual objects which constitute the raw materials of our food, clothes, fuel, shelter, and household comforts. The germs of intelligence bud into an eager interest to learn more concerning the industrial arts which have their base in these raw materials, whose fabrication provides us with our means of food, warmth, rest, comfort, and enjoyment, upon which the well-being of our race depends.

By the storing and comparison of facts they learn to draw inferences, and, by simple inductions, get their first glimpse at those economic laws, obedience to which is the source of our future good men and women, good fathers and mothers, good masters and servants, good capitalists and labourers, good citizens and communities.

Pursued through the elementary stages of school-life, by means of vivid word-painting of the chief sites of the world's industries, together with the inculcation of the economic virtues, and of the vital part which labour plays in the progress and happiness of mankind, such teaching endows the young with principles which apply to every and any career. Taught to bestow their painstaking diligence upon every task, to strive after skill and knowledge from which intelligence is evolved, to be trustworthy, willing, obedient, and kindly disposed, to be thrifty without self-mortification or meanness to their fellows, to acquire foresight and forethought, and the conviction that the crowning blessing of wealth is to make others happy, our rising race will have laid a firm foundation for the technical or practical application of their teaching, and may be left to do their duty in whatever state of life it may please God to call them.

To the teaching of the principles of productive industry —leading the young to aspire to excellence and perfection in every work they undertake—there is no set bounds. It is a training which establishes character by the formation of habits, one to influence their lives for good and elevate the tone of society. Youths happily placed to pursue their studies, and thus furnished with a scientific knowledge of the raw materials in which they will deal, or with technical knowledge of processes which will be the after-object of their constructive skill, together with information of what commerce has done for mankind, and how and what nations, from ancient to modern days, have, through commerce, risen to wealth and power, and influenced the course of human history—such youths are already embued with lessons in practical life to qualify them, by their acquired intelligence, for our technical colleges, whether agricultural or otherwise, and for enlightened administrators of capital in any division, commercial or industrial, of productive labour.

PART II.

OUR FOREIGN AND COLONIAL RELATIONS
AT
THE CLOSE OF THE NINETEENTH CENTURY.

PORTUGAL AND THE PORTUGUESE EMPIRE.

THE condition of Portugal at the close of the nineteenth century, must be described as that of peace without progress or prosperity. With a revenue not exceeding an average of about seven millions sterling,—which for many years has been much below the expenditure,—and weighted with a national debt estimated at over one hundred millions, rapidly growing larger, absorbing in interest over three millions annually, commerce continues stagnant, hindered from expansion by restrictive laws which react unfavourably upon the few native productive industries.

Trade intercourse with the United Kingdom,—which is almost exclusively in British hands, and comprises a large portion of the foreign commerce of the country,—does not amount to the small annual revenue, even including the trade of the colonies; and, with minor fluctuations, has stood at the same low point, for several decades of years. The special trade of Oporto in wine has been influenced by the change of taste for the lighter French wines, brought about by the reduced tariffs of French Commercial Treaties. The exports of port wine, a specialty of the British market, have not kept pace with our population, and have only been saved from disastrous diminution by an extraneous demand created by our growing wealth. Notwithstanding, the depression of a state so admirably situated geographically, is the more remarkable in that it is inclusive of the colonies, which, in proportion to the dimensions of the mother country, are, even since the excision of Brazil, of very great extent. Portugal now claims no settlements in America, but in Africa and Asia, exercises jurisdiction, more or less complete, over territories of 200,000 square miles, together with further official or paper pretensions to nearly half a million miles of the regions of Mozambique and Angola.

The chief African possessions of Portugal are the Madeira and Cape Verd islands off the west coast. Madeira prospers as a sanatorium of wealthy invalids from England, especially consumptive sufferers, of whom it is, in its social aspect, an English colony. The fertile islands of St. Thomas and Principo in the Gulf of Guinea are Portuguese. On the mainland, various territories south of the Gambia, and covering an area of 350 square miles, are known as Portuguese Guinea. The kingdom of Angola, comprising territories to the north of the Congo, and the whole of the coast south of that river, as far as Cape Trio with Loando as the capital, is subject to Portugal, which claims indeed, as we have observed, vast contiguous regions inland, without the power to exercise authority. The Portuguese are also allowed, on sufferance of the King of Dahomey, to hold a fort or trading station at Whi-dah, the principal port of the kingdom. They possess also a few small stations in India; Timor, in the East Indian Archipelago; and Macao, at the mouth of the Canton river in China.

BRAZIL.

Brazil, the grandest scion of the Portuguese race, with its matchless resources in all the three kingdoms of nature, awaits the dawn of the twentieth century, clinging to the commercial traditions and economic fallacies which have so greatly injured the parent state. The produce of the empire is exclusively that of raw materials, in infinite variety. There are no manufactures; certainly none of a magnitude to be called national. Every description of clothing and manufactured goods is imported. So little impression has been made upon the resources of this magnificent empire that the country may be said to be strictly described as quite undeveloped. Here, therefore, are apparent the conditions of a commerce as flourishing and wealth-producing as the world can present. Every industrial community would be ready and eager to pour into Brazil the surplus of its productive labour in the form of clothing, household requisites, domestic comforts, and the treasures of its science and art, in exchange for the exuberant precious stones and metals, the prolific fruits and grain, the flesh-foods, hides, tallow, bones, and horns of this vast and favoured empire. Intelligence suggests that interchange on the grandest scale and of universal benefit would spring from these elements, unaided by any artificial encouragement. Notwithstanding its exceptional advantages, Brazil does not advance, even if it does not retrograde. Its foreign trade is greatly in the hands of the Germans, with agencies in London; the total imports and exports average about 398 millions of milreis, the *exports* for the last two decades have continually increased, but the *imports* fluctuate considerably. The exports of coffee alone, in 1868, reached a value of six and a half millions, the bulk being consigned to England, whereas the whole exports to this country in 1881 were barely more than six millions, and in 1885 were under five. A remarkable feature in the *British* trade is the uncommon fact, that our exports to Brazil exceed, as a rule, our imports therefrom—in 1885, by about one million and a quarter sterling. This indicates less unwillingness to receive manufactured commodities from England than to part with raw produce in exchange. Yet, for a heavily-burdened country with revenues unequal to its expenditure, to balance its trade account with specie, of which it has little, rather than in kind, of which it has much, seems quite as difficult to understand. The commercial policy of Brazil solves the problem. Instead of free play to commercial intercourse, the Portuguese plan of hampering trade and checking its natural development is greatly improved upon. Onerous imposts are laid upon commodities, both of export and import, in some cases to the extent of a third or more of their value. Nearly the whole of the revenue is raised from customs' dues, and enterprise is weighed down thereby. The fiscal system is not protective, but entirely to raise ways and means for the crown; but it is more burdensome and destructive to advancement than the most stringent enactments of law, to subserve both purposes, that the English ever had to bear in the darkest days of customs and excise. The system of discouraging exports by exactions from native produce is worthy of China. Even Russia is willing enough to sell to the foreigner, and only halts at buying. Under the gross economic error that the heavier the duty the heavier the yield, an error as great as—the heavier the burden the faster the horse will go—Brazil handicaps her home industries until her superabundant raw produce lies on hand unsold, while the twin policy of filling her coffers at the cost of the foreigner only keeps manufactures, which her people direly need, out of the country, and cripples the empire's finance.

SPAIN AND SPANISH COLONIES.

Although Spain strictly protects its home industries by high customs' duties, circumstances have wrought liberal tendencies which do not prevail in the sister Iberian kingdom of Portugal, and which have therefore established greater commercial progress. The settled and quiet state of the kingdom since the present constitution was formed in 1876, and the accession of King Alfonso, a native prince, has continued through the Regency constituted after his lamented death, and proved eminently favourable for the consideration of the economic resources and condition of the country. Great efforts to place Spanish finance on a satisfactory basis, have resulted in consolidating the *national* debt to an amount just over 233 millions sterling, bearing interest at the rate of 4 per cent.,—besides a considerable *floating* debt,—against which is the set-off of unsold national property computed of the value of 134 millions. Imports from the United Kingdom have largely increased during late years, although the *exports* are, on an average, three times as heavy as the *imports*. The figures are bound to improve through the instrumentality of a new treaty of commerce, of mutual benefit to both kingdoms, which provides for a reduction of British duties on Spanish wines and an equivalent reduction of Spanish duties on British manufactured goods. The negotiation of this treaty with Spain is used by the school of economists calling themselves "fair traders" as distinguished from "free traders," as a forcible argument in support of their doctrines, for it is certain that Spain would not have diminished her port charges upon British commodities, except as a profitable bargain between the two states, or had England previously admitted Spanish wines free.

This treaty was forced upon Spain, in a measure, by the change of English taste, induced by the abundance of the lighter French wines brought into England as the result of an earlier Anglo-French Treaty of Commerce. The demand for the sherries of Spain was annually ebbing away, and the chance of reviving the demand, which England offered, by placing them more nearly on a level of admission with French wines, was not to be wilfully lost.

Spanish exports to the United Kingdom are swelled indirectly through the wine trade of France. "The winegrowers of the Garonne, driven to despair by the ravages of the *Phylloxera*, have supplemented their native vintage by the stronger wines of Spain. Bordeaux clarets have, in a great degree, ceased to be a natural product, and have become an elaborate chemical beverage, prepared from dried Spanish raisins and Greek currants, only one-fourth of the weight being required as a substitute for fresh grapes." As a consequence, the Greek currant trade has multiplied in a very few years to tenfold its previous dimensions; the principal part of the carrying trade being in the hands of the English, who afterwards drink the sham Bordeaux. Artificial French wine is of very pale hue. To heighten the colour, the vintages of Catalonia and the cheap wine of Val de Peñas are freely blended with the liquor. This Val de Peñas is produced in such lavish abundance, that much of the vintage is said to be allowed often to run to waste in the gutters, or is mixed with the mortar for building, from the deficiency of casks to store the yield. Pseudo claret, from raisins, is wholesome and palatable and possesses many of the qualities of wine direct from the grape. Consumers of extant Bordeaux, in the United Kingdom, the Colonies, and India, must be content to drink what the merchants send them, assured that it is far superior to the *petit bleu* which the masses in France are compelled to accept, in lieu of the cheap, fruity, and nourishing wine which they formerly drank.

A measure of Spain's most recent progress may be taken in her railways, of which over 5600 miles are open for traffic; and above 1500 miles more are under construction or concessions have been obtained for them.

SPANISH DEPENDENCIES.

The colonial possessions of Spain, almost wholly insular and tropical, are reduced to the shadow of her former empire on the mainland of America, yet remain of considerable importance to the mother country, consisting of an undisputed but dispersed territory of 166,000 square miles, in both hemispheres, with a Spanish and native population of eight millions of souls. Of these dependencies the islands of Cuba and Porto Rico in the West Indies, and the Philippines in Asia, are jewels of the Spanish crown, and pre-eminently of greater value than all the others combined. Commercially, these islands remain in the hands of foreigners, and if not at a stand-still, or retrograding in trade, have not advanced even to an extent to correspond with that of the parent state. British trade, to which that of these colonies may be regarded as confined, amounts to between five and six millions annually, which is less than formerly, and of which the imports from the United Kingdom exceed the colonial exports in the ratio of about two to three. Internal political dissension in Cuba, militates against prosperous trade; the most recent history of which island is, however, relieved by the gradual extinction of slavery and the slave trade.

Spain has clung through adversity more pertinaciously to her colonial empire, shorn of its splendour, than to her earlier grand mainland possessions in both the continents of the New World. With her approximation again to the rank of one of the great European powers, she has disputed the rights of Germany to colonise the Pelews and Carolinas, islands of the Pacific, which are claimed by the Spaniards as the discoverers in the sixteenth century, but of which they never took effective possession, although always included in the Spanish colonial documents. An amicable arrangement was brought about between Germany and Spain, by the intervention and arbitration of the Pope, to whom the conflicting pretensions of the two states were referred. The Marianas, also in the Pacific, are in the acknowledged possession of Spain. The Spanish dependencies in Africa are comparatively insignificant, comprising, on the west coast, the small town of Ifui, Ceuta, immediately opposite to Gibraltar, with a few other "Presidios" in Morocco. So recently as 1884, Spain declared a protectorate over the barren coast between Capes Bojador and Blanco, which may possibly lead to the establishment of a few unimportant trade factories of service to the fishermen of the adjacent Canaries, which, with the Balearic islands, own the sovereignty of Spain, and with Fernando Po, the island of Annoban in the Gulf of Guinea, and the coast around Corisco Bay, completes her colonial empire.

THE SPANISH MAIN.

ARGENTINE REPUBLIC, OR LA PLATA.

By the Treaty of Buenos Ayres in 1881, the two Spanish Republics of La Plata and Chili were enlarged by the absorption between them of Patagonia and Tierra del Fuego. Under the constitutional government settled in 1869, and by the encouragement given to immigration, the commercial prosperity of the Argentine Republic, though hampered by the hereditary economic errors of the Spanish race, is being fairly, if not rapidly, ensured. Recent gold finds in Patagonia have raised hopes of the peopling of that uninviting region. There are between 4000 and 5000 miles of railway in working order, and more are projected. British intercourse has doubled in the closing quarter of the century, though retaining its character in regard to the commodities exchanged, and in the large disparity between the exports and the imports, the value received into the country averaging four to one to that sent out. The exports are almost exclusively of animal produce, although the vegetable and mineral resources are both rich and varied. Imports are nearly confined to manufactured goods, the manufactures of the country, like those of the Spanish Republics generally, being insignificant. Trade is carried on chiefly with the United Kingdom, with France, and with Belgium. The *imports* being considerably the largest from Great Britain, while France leads the *exports* by a long distance.

URUGUAY.

With an advancing population of rather more than half a million souls, the Republic of Uruguay is, in proportion to its numbers, the best foreign customer which the United Kingdom possesses; this trade in character resembling that of La Plata, amounting, annually, more or less, to about two millions sterling. The Republic enjoys the advantage of an entirely free system of elementary education, to which great attention is given, and to which the more advanced intelligence of the people is doubtlessly due. The main wealth of the Uruguayans is derived from pasturage, which sustains many millions of cattle, horses, and sheep the quality of the wool of the last being excellent.

CHILI.

Chili acquired, by the Treaty of Buenos Ayres with the Argentine Republic, an accession of territory of 75,000 square miles, an area considerably larger than the whole of Great Britain. As the issue of the subsequent war so disastrous to the forces and power of Peru, Chili also acquired the Peruvian provinces of Tacna, Tarapaca, and Antofagasta, and has become the most powerful republic of South America. These provinces gave to the Chilians, at the cost of Peru, several rich mines of nitrate of soda, the product of which with copper and regulus form the *staple* exports; the values fluctuate. Chilian enterprise, industrial and commercial, is exhibited in the agricultural implements, which are of the newest and most improved kinds, and in the active share which the native merchants take in trade. Railways extend for nearly 1500 miles; there are over 7600 miles of telegraphs, and the postal service is more than usually complete. The exports consist primarily of metals. More regulus, or copper ore, enters British ports from Chili than from all other sources besides. But for the devastating war with its sister state of Peru, and the long period of trade depression which prevailed universally soon afterwards, Chili must have made considerable strides in well-being. As it is, the republic has, at least, maintained its way, with early promise of advancement. Emigrants are arriving from Europe, and the population increases with fair rapidity. Several lines of steamers trade between Valparaiso and Panama, reaching England in about forty days. The gross annual foreign trade of Chili averages about twenty millions sterling in value, which is narrowly divided between imports and exports. Commercial intercourse with the United Kingdom is principally in copper, wheat, barley, and nitrate on the one hand, and textiles, iron, and hardware on the other.

PERU.

The sanguinary contest between Peru and Chili, by which the Peruvian army was well-nigh annihilated, and the navy was lost to the enemy, with several of the richest provinces of the Republic, left the country prostrate and disorganised, both politically and commercially, and a prey to intestine strife for power, from which it must take many years to recover. Added to the financial loss to the revenues of Peru, from the costs of the war, and the severance of the provinces, there was the commercial loss of the valuable deposits of guano and nitrates, which had been the chief exports of the state, and the mainstay of finance.

PARAGUAY.

The hopes that were entertained that the opening of the rivers Paraguay and Parana to commerce as a result of the subjugation of the country by the combined forces of Brazil and La Plata, have not been realised. Paraguay is one of the smallest states of South America, and the only one quite destitute of sea-board. Its commerce, which was far from insignificant while the country was a dependency of Spain, was wilfully left to perish under the rigid regime of Dr. Francia, and no real effort to effect its revival has since been made. The detriment to the republic from the combination of these adverse causes has been almost fatally severe. Commercial relations with the United Kingdom are not *direct*, but pass either through Brazil or the Argentine Confederation. The *total* exports in 1884 only amounted to one and a half million pesos, and the *total* imports to a like amount. Great Britain enjoys about 50 per cent. of the total import trade.

BOLIVIA.

Bolivia or Upper Peru presents no new features, political, social, or commercial, to distinguish its history as the nineteenth century closes. The repetition of the previous description of this richly endowed but uneventful and non-progressive state, would faithfully represent its present condition and absence of enterprise after the lapse of a quarter of a century.

UNITED STATES OF COLUMBIA.

The States, with the exception of Panama, which coincides with the isthmus uniting North and South America, offer little or nothing new or of interest in their most recent commercial history. Foreign interchange generally, as of that with the United Kingdom in particular, has rather retrograded than expanded; the means of communication remain imperfect; railways are still in their infancy, and including that of Panama between the Atlantic and Pacific, do not extend to 150 miles, and facilities for correspondence are still in a low condition.

The interest in Panama centres in the great ship canal projected by Lesseps and now in course of construction. The prosperity of this state is due entirely to its favourable position, geographically, as the shortest highway between the Atlantic and Pacific Oceans, although the pastures are eminently suited for the raising of cattle, and agriculture is the leading industry. Limon Bay on the Atlantic side is only 35 miles from Panama on the Pacific, and the greatest elevation between the two points is less than 300 feet. The specification, taking the most convenient levels, provides for a water-way of 47 miles, with an average depth of 28 feet, and a minimum width of 72 feet. It is computed that 157 millions of cubic feet of earth and rock have to be removed in the construction, and vast flood-gates are required to regulate the tides, which rise twenty feet on the Pacific side, but are almost stationary on the Atlantic.

The work has occupied 20,000 labourers, and its completion, which was stipulated for in 1888, must so facilitate maritime intercourse between all the chief seats of the world's industries, by saving the dreary and perilous passage round the stormy Horn, that 24 millions expended in the prosecution of the work, promises to be a remunerative investment of capital in regard to the advantages to be gained.

MEXICO.

The history of the Confederated Republic of Mexico, a Spanish state, which, ever since the incorporation of the Territory of Texas with the American Union, covers a superficial area of three-quarters of a million square miles, is the record of political convulsions lasting through the nineteenth century, and fatally inimical to social and commercial progress. The material development of Mexico, wherever it is apparent, has come from without, not from internal enterprise; forced upon Spanish sloth and native barbarism by the intelligence and energy of immigrants, and by the vigorous intervention of the United States, into which great Union it is the possible destiny of Mexico—as with its two great provinces of California and Texas—to be absorbed.

The railway system of Mexico extending to about 3600 miles, and the telegraph wires to about 13,000 miles, are the work of the United States engineers, and are the property of companies in the Union. To the same constructive skill and capital has been committed the "Thoroughfare" systems of rail and wire connecting Mexico with the States, and thus developing the material resources of this rich region, where "all but the spirit of man is divine." Foreign commercial intercourse, in which Mexico itself bears only a passive part, is lamentably small, not reaching half the dimensions it once assumed, and not corresponding to a fiftieth part of the productive capabilities of the country. The annual interchange with the United Kingdom averages about two millions sterling, the imports from Great Britain have decreased continually for the last few years, and in 1885 the export and import returns nearly balanced.

NETHERLANDS (KINGDOM OF HOLLAND).

The industrial and commercial career of the Dutch during the last quarter of the century is that of plodding and uneventful progress, free from the extremes of trade perturbations which other states have suffered. The total home commerce of the kingdom which, at the end of the third quarter barely reached 100 millions sterling, has exceeded, before the end of the century, 165 millions, by a comparatively equable and normal growth. In this trade Great Britain may be said to share to the extent of about 28 per cent. of the imports for home consumption, and 22 to 23 per cent. of the exports of home produce. The growth of the Dutch exports to England has been promoted by the great demand for dairy produce, the supply of which Holland has shared with our new sources in America and France. The new industry of pseudo or bosch butter (butterine) alone, referred to on an earlier page, has expanded to an immense magnitude.

It is difficult to analyse the trade with Holland, as much goods pass simply "in transitu" and cannot be classed genuinely among imports and exports.

Great Britain imports largely from the Netherlands dairy produce, cattle and sheep, with gin and some manufactures:—the value of butter and butterine alone amounted in 1885 to 4½ millions sterling—and returns in the main "yarn" both woollen and cotton.

It is stated that, within a very short period, a curious inversion in ratio has taken place between imports and exports with Great Britain; namely, imports to exports a few years back equalled a ratio of 2 to 1, and these have since, by a graduated process, assumed the inverse ratio of 1 to 2.

NETHERLANDS (KINGDOM OF BELGIUM).

The designation of the *Netherlands* which, when Holland and Belgium were united under one government, was the common appellation of both countries, is now commonly restricted to the kingdom of Holland. The flourishing condition of the small kingdom of Belgium is testified to by a comparison of trade statistics, of short intervals during recent years, of its commercial intercourse with the United Kingdom, although interchange with France is on a larger scale. Its British trade, which in 1875 had doubled what it was in the previous decade of years, has fluctuated but slightly within the last few years, the exports from Belgium being double the import of British produce into Belgium. The progress of Belgian industry, in some branches, has been manifested to the alarm of our own manufacturers, by the acceptance and execution of orders in metal work, such as railway plant and nails, in which the English vainly imagined themselves to be unapproached and unapproachable. Belgium stands foremost in nail-making, and exports the prodigious number of 3½ billions. per annum, of 10 different sizes, through 3000 varieties of nails. England exports fewer than this by a billion in number, or 300 tons in weight, though the home consumption is vastly larger.

The railway system, approximating to 3000 miles, of which three-fourths belongs to the state, is in regard to the extent of the country, the most complete in the world, and furnishes a revenue of 120 millions of francs to the state, with a "contra" amount for expenses of 70 millions of francs.

The present enlightened king, Leopold II., takes a profound interest in the well-being of his people. Under his auspices, and at his own personal cost, the intense but long unsuccessful desire to found colonies abroad, has, in a measure, been gratified. Missions despatched to open up Central Africa to the civilising influence of commercial intercourse, promise inestimable blessings to the races of the "Dark Continent" as well as to the world at large. Springing out of the African geographical discoveries of Stanley, who found an earnest personal friend and patron in Leopold II., and subsequent explorations by the International Association of Brussels, a new "Congo Free State," of which the river of that name constitutes the leading feature, and under the sovereignty of the King of the Belgians, was recognised by the leading commercial powers. This African territory includes within its bounds 800,000 square miles, with a population of negro tribes backward in civilisation, some little better than cannibals. Railways are projected, but the barren mountain lands which shut out the fertile interior from the sea, present such difficulties in developing the resources of the country, that grave doubts are entertained of raw materials ever being able to repay the cost of transport.

SWITZERLAND.

Interesting in its economic features, equally as in its physical and political, the Helvetian Republic resembles in many respects, by the very contrast of conditions, the still smaller state of Holland; the latter being "fished up from the sea," while the former is the home of glacier and mountain. Nature has been niggard to both small states in the denial of productive resources; since, bereft of metals, the self-sustained industries of each are confined to husbandry, alike and unlike in their operations, the one on the low-lying emerald meadows, the other in the verdant valleys, and on the mountain slopes. Every form of industry beyond must be imported. The sea and the mountain air inspired the respective races with a fearless love of freedom, but the wide world invited Dutch enterprise, while the Swiss were land-locked, hemmed in all round by powerful states. With surroundings to disarm rivalry, if not to incite the contemptuous pity, of more highly favoured states, Holland and Switzerland have triumphed over seeming impossibilities, and taken rank amongst the most flourishing industrial communities in Europe.

Swiss industry has become a source of actual but incongruous alarm to several branches of English industry, well as the Swiss producers must earn their advantage. The demand, for example, for foreign boots and shoes, due to greater excellence of fit and finish, to which we have referred as frightening the English cordwainers, applies in a marked degree to Swiss goods. Yet the raw material is not so easily or cheaply obtained as in England, whence, indeed, it mostly comes. Swiss watches and clocks also compete successfully with those of English make, and again with no advantage in obtaining the materials of structure. Hall-marking of cases of Swiss make has been strenuously objected to by the English watch manufacturers, as interfering with their trade, but hall-marking is simply a guarantee of the purity of the gold or silver, not of the source of making the cases.

A sixth part of the surface of Switzerland is covered by forests, the timber from which gives birth to an industry in wood-carving in which the Swiss are unequalled. The International Exhibition of Inventions at Kensington in 1885, brought Switzerland to the front in many products of art and science. Chemical preparations, and food substances such as cheese, preserved milk, and confectionery, fetch prices in England not reached by home preparations. Works of art in wood, jewellery, enamel, imitation flowers, lace, textiles (particularly silks), and fancy goods, have arrived at perfection. Antique and artistic pottery, musical instruments, and, more than all, time-keepers of every variety and anticipating English improvements, place Switzerland in the highest rank of skilled industry and invention. The obstacles of nature have been an incentive to efforts after excellence. The wonderful progress of the Republic is to be traced to the care taken in the teaching and training of the young in economic principles, which they apply afterwards in their industrial pursuits. There is a greater communion of sentiment than in England between employers and employed. Workpeople grow up from childhood in one firm, sure that their employers will take no advantage, and sure of work as long as they do their duty. Their interests are never forgotten, and every year sees something done for their benefit—having libraries, dining rooms, savings banks, sick clubs, baths, provided and kept up by yearly subsidies from their employers.

Being an inland country, everything of Swiss production must pass through intermediate states, where much of it is absorbed. There is, consequently, but a small intercourse directly with England, and statistics are of little value, the commodities really figuring as the exports of Germany, Belgium, and France. Nevertheless, Switzerland avails itself of the facilities of communication now brought to so great perfection, and is able to undersell, in the markets of the world, greater and older established manufacturing countries.

ITALY.

The finally effective union of the Italian States under one crown, and the establishment of the Kingdom of Italy, gave birth to visions of political and economic prosperity which can hardly, as yet, be said to be fully realised. Burdened with a debt of between 400 and 500 millions in amount, the annual interest on which exceeds 20 millions sterling, and with the cost of the effective forces, permanent and reserved, of more than two millions of men, as well as of a powerful navy, containing some of the largest and most heavily armed ironclads afloat, the industrial and commercial progress of the kingdom has been seriously impeded, while viewed as the price paid for unity and constitutional freedom, the drain upon the national resources has been accepted without unreasonable demur.

The normal annual increase of the Italian foreign trade is rather under a million sterling. The *total* imports and exports fluctuated very little of late years, the former gradually increasing, the latter showing greater movement but generally retrograding. Of late years the total amount reached the enormous sum of 1½ billions of lire. The chief trade is with France and Algeria, Great Britain coming next; the imports from the United Kingdom being more than double the value of the exports from Italy. In the development of the British trade, dairy produce figured largely, butter and cheese being sent from Italy and courting the taste of the United Kingdom by their excellent quality. Means of communication and correspondence are making rapid progress, and, with their improvement, the productive resources of Italy must be further greatly developed. Between 6000 and 7000 miles of railway are open for traffic, and others are in course of construction or projected. Nearly 20,000 miles are likewise fixed of telegraph wire. Hopeful features of the future of Italy are presented in the sure, if not rapid, growth of its industry and commerce, the spread of elementary education, and the national thrift, which, if not displayed in the government ironclads, is evinced by the masses in the savings' banks' account, which shows to the credit, in a double sense, the grand balance of 40 millions of pounds sterling.

FRANCE.

The salient features of French commercial industry since the downfall of the Empire and the re-establishment of a republican form of government, may be described in connection with the effects produced by the disastrous Franco-German war, upon the political and economic well-being of the state; upon the freer expression of public opinion than under the Empire, in relation to industry and trade; and upon the efforts made by the Republic to redeem its political prestige, by the acquisition of colonial possessions, as a counter-balance to the loss of the fair provinces of Alsace and Lorraine.

Economic progress has felt the effects of the previous ravages or the fungoid diseases which had attacked the fruit of the vine, as well as the silkworm, and threatened extinction to the staple manufactures of wine and silk. The *Oidium* which covered the ripe bunches of grapes with mildew, had spread over Europe, reducing even the Greek currant culture to a twelfth of its normal amount. The recuperative powers of the industrial genius of France were not displayed in a more striking manner by the way in which the country met and bore the colossal burden of two hundred millions sterling, imposed by the conquerors as an indemnity for the war, than by the measures taken, with eventual success, to stamp out the vine and silk-worm disease, which had reached the dimensions of a national calamity, of greater magnitude than even that of war.

In spite of the marvellous development of the French Trade Returns, after the Cobden Treaty, the disasters left by the war gave a bitter remembrance of the Empire, and to the commercial policy with which it was identified. Reactionary sentiments set in, and public opinion was forcibly swayed by the protectionist school of economists. With the lapse of the Cobden Treaty of 1860, strong feeling was exhibited against its renewal, to which England had to yield some important concessions. To some extent, objections were raised on both sides the Channel, and on contrary grounds—pressed by the French, that the arrangements unduly favoured the English, and by the English, that they favoured the French,—inconsequent arguments proving the inherent fairness of the principle.

French foreign trade did not suffer from the Franco-German War as it had done under the aggressive strife of the first Empire. The aggregate of *home* exports and imports which in 1868, amounted to a value of 244 millions sterling, increased actually during the war. In 1872, it reached nearly three hundred millions; these vast sums have been maintained with little alteration in subsequent years. A reasonable inference from the fact is, that Napoleon III., by the wisdom of his commercial policy, imparted such elastic vitality to industry and trade, that it has stood proof against adversity and vicissitudes wrought both by nature and man.

During this period, French imports have been, normally, in excess of exports, and the disparity tends to increase. Commercial intercourse with the United Kingdom which, on an average, is about one-sixth of the foreign trade, possessing an opposite relation between exports and imports, has been adversely influenced by recent depression, which the remedy applied of new restrictions, has only intensified. Although France, as a commercial state, ranks next to the United Kingdom in the extent of trade—being approached only by the United States—the annual returns amount only to about half those of British trade, to which, however, France contributes at this time more than any other country in the world, except the United States and India.

France is pre-eminently a wine-producing country, and

French brandy stands at the head of spirits of its class; vast quantities of beet-root spirits are also distilled. Nevertheless the importation of wines, spirits, and beer, is greater than the export—a phenomenon arising in the first place from the grape fungus, from which the vintage has not permanently recovered, and, in the second, to the growing taste for the light German beers, arising, in a measure, from the deficiency in the wine produce.

The grape famine has brought out the productive energy and skill of the French in a remarkable manner. Unwilling to submit to the sacrifice of a great and characteristic national industry, the wine-producers have turned their capital to other sources of supply. Spanish and Turkey raisins and Greek currants are brought to Bordeaux, Cette, and Bercy, in prodigious quantities, to take the place of the fresh ripe grape in the wine manufacture. These dried fruits are equivalent to four times the weight of the fresh gathered bunches, and are cheaper, rather than otherwise, than the native vintage even when abundant. The elaboration of the juice with lukewarm water and sugar is of the simplest character, and by blending with the profuse yield of the common strong wines of Spain, aided by the advances in the chemistry of ethers and essences, experts produce such excellent imitations of every brand of clarets, that connoisseurs are at a loss to distinguish the artificial from the genuine. The best imitations of Bordeaux come to England, where, as in India and the colonies, consumers of the beverage labelled as claret, must be content, unconsciously, to drink a wine agreeable in flavour, altogether wholesome, and possessing many of the qualities of that of the fresh grape, while innocent *in toto* of a French vintage. The grape fungus almost destroyed the vine culture, but it is, though with difficulty, being revived.

The same reflections might be made, both with regard to the inherent character of French energy and intelligence, and the revival thereby stimulated of sericulture. The terrible suffering caused in the south of France by the epidemic which first attacked the silk-worm in 1848, drew Pasteur's attention to the microscopic examination of the eggs, seed, or graine, and he described the differences presented in diseased and healthy seeds. By double microscopic selection of the eggs, coupled, when hatched, with an ample supply of mulberry leaves, and lofts kept carefully ventilated and clean, healthy worms of fine size and appearance went through their transformations and duly spun their cocoons. Infection had undoubtedly been spread by the inattention of poor breeders generally to these points, or from want of sufficient means to carry out the operations properly. The instant removal and burial of infected worms prevented the wafting of fungus germs in the atmosphere to alight on healthy broods; and the importation of new "graines," outside the region of contagion, has been successfully tried to renovate the broods. Not less than six varieties, several of them remarkably large, feeding on different kinds of leaves, such as those of the oak and castor-oil plant, and producing a strong fibre, have been Introduced. By such efforts as these, advised by scientific consulting naturalists, the government and breeders have co-operated to bring back prosperity to the French silk industry, and are hopeful, eventually, to extirpate every trace of the silk-worm disease. Unfortunately for France, the epidemic not only went far to destroy the home consumption of the produce but stimulated other countries to produce for themselves, and thus lost to France its best and oldest customers. A happy promise of the future of the French silk industry is given in the new means invented for the utilisation of the waste or floss silk, which forms the outer covering of the cocoon, and has heretofore been discarded as useless. The economic importance of this invention, by which the quantity of silk fibre is indefinitely increased, cannot be over-rated. It has given new life to a fading industry in Great Britain; and must, within reasonable time, replace in France and other countries the many millions lost through the silk-worm disease.

RUSSIA.

Russian annals are far from a bright chapter during the closing quarter of the nineteenth century. An emperor moving in fear, sedition ruthlessly repressed, finances disorganised and trade failing, and a people yearning for liberty, which the government dares not grant, are the unhappy issue of Peter's autocratic measures to develop the national well-being, and of the martyred Alexander's emancipation of the serfs. The huge empire, monopolising one-seventh of the habitable globe, with resources practically inexhaustible, and making strenuous efforts for generations past to foster home industries and commerce, has never ranked high in an economic or productive sense, or created a trade intercourse with the world at large, beyond that of a third or fourth rate power. The comparatively large interchange formerly carried on with Germany has, during the period under review, tended downwards. The aggregate of trade with the United Kingdom, which before 1875 approximated £30,000,000 sterling, has dwindled away by a third of that insignificant amount, and still tends to droop. The corn of South Russia, once the dependence of Europe for the balance of production needed by any and every state, scarcely forms an item in their trade returns compared with the imports of grain from other quarters. The outlook is just as gloomy for the specially Russian industry in the growth of hemp and flax, the crops of which have been frequently of greater value than the entire yield of grain. Importers and manufacturers are looking elsewhere for these fibres ; and Canada, particularly the Great North West, offers a limitless and inexhaustible field of supply. Wherever hemp has been grown north of Ontario there has been a prolific yield, with great length of fibre ; the plants thriving splendidly, often attaining a height of twelve feet.

Three species of flax are indigenous to Canada. In the French provinces it has been cultivated from the middle of the eighteenth century, and woven into linens. Although the Russians raise an enormous quantity of flax, it is inferior in quality to that of Dutch, Belgian, Irish, or Canadian cultivation.

A striking feature of the Russian trade is shown by the disparity between imports and exports in its intercourse with the United Kingdom, the imports only occasionally exceeding, and often being considerably less than half the value of the exports, with an increasing tendency to widen the disparity.

Reasoning from these facts, one is driven to the conclusion, since the decadence of Russian commerce cannot be attributed to any failure of resources, that it must be owing to the economic policy pursued. We observe a willingness on the part of Russia to supply her own produce to any extent, but an unwillingness to take the manufactures of Great Britain in exchange. The exclusiveness of the Russian commercial system vies with that of Dr. Francia, in Paraguay, or that which sealed the coasts of China so many ages from foreign trade. Legal restrictions upon British manufactures are almost prohibitory. Trade customs interfere with easy intercourse, Russian merchants demanding ready money, or payment long in advance, for goods on delivery, or even while the produce is maturing in the fields.

The condition of Russian trade is a warning commentary upon the principle of restrictions to commercial intercourse between different states. In our country there are economists who assert that the immensity of our commerce is due to other causes than freedom, which indeed is the ruin of British manufactures. In Russia the conviction is acted upon, that prohibitive duties upon foreign commodities foster home manufactures. It is, however, a remarkable fact, that the vast and rapid growth of British trade, and the stagnant or declining trade of Russia, are phenomena coincident with free-trade principles in the first case, and protectionist principles in the second. Such coincidences can hardly be believed to be purely accidental. Russia, in proportion to its magnitude and population, should profit by a commerce as large as that of England. It would be, at least, as easy to rank before any other European state as to stand so low. The practical effect of limiting the commerce of the empire with England to 20 millions, when it might be 100 millions, is to deny to the masses, annually, the comforts and necessaries represented by the balance of 80 millions, the profits on which are poorly made up for by the rude, rough, and dear manufactures supposed to be encouraged. Besides this loss of commercial profit, foreign customers cast about for sources of supply where the advantages are reciprocal, and the means of intercourse are now so greatly extended, that the two Americas and our splendid dependencies in the southern hemisphere, more than amply supply the lack of commodities from Russia. The semi-barbarous empire, notwithstanding, clings the more convulsively to its policy, the more its commerce recedes, and its hemp and flax trade seems destined to pass to Canada, from new imposts recently burdening the admission of British textures in exchange.

The importance to Russia of its hemp and flax produce is testified to by the fact that four-fifths of the consumption of these commodities, or 80,000 tons out of 100,000 in the United Kingdom, have been drawn from the empire—in round numbers, £2,000,000 worth annually. Both English and Irish manufacturers express, on purely business grounds, a preference for Canadian hemp and flax; because of the numberless annoyances they are subjected to in their transactions with Russia, their letters being opened, delayed, or sent to the wrong people by the Russian postal officials, while the prompt execution of their orders is never effected. The inquisitorial system of Russia obstructs the export of goods as much as if the government grudged, instead of being anxious for the trade; a suicidal course to pursue in commodities like hemp and flax, with such various sources of profit accruing, as from the fibre, seed, oil, the refuse from the fibre for paper-making, and from the oil mills as mark or cake for cattle food. A small body of Russian Mennonites, who left their country to settle in Manitoba, took their industry with them and started the cultivation of flaxseed; at first losing the fibre for want of a market. Now, their yearly produce reaches many thousand tons, and rapidly expands.

SCANDINAVIAN STATES.

SWEDEN, NORWAY, DENMARK.

Commercial progress has been steady, without departing from its normal character of excess of exports over imports, as these Scandinavian States have approached the close of the century; but, except the fact that Denmark has recovered its status as a commercial nation since the severance of its German provinces, nothing of historical importance calls for remark.

AUSTRIA.

The highly-protected industries of the Austrian Empire, only second in area of European states to Russia, do not admit of expansion, or of creating a large foreign intercourse. Compared with the rich natural resources of the country, its commerce is absolutely as well as relatively small. Its transactions with the United Kingdom are, at the best, stationary, and hardly amount to more than a tenth of the trade between England and the little kingdom of Belgium. If the direct purpose of a protective system had been to confine the productive powers of a state within the narrowest bounds, no greater success could have attended its operation than is witnessed, after many years' trial, in Austria, where the very opposite purpose has been aimed at of encouraging their growth. Easier and cheapened means of communication have opened a winter market in England for game from Hungary, which comes over in large quantities, and adds to our food stores. Though important in itself, this item makes no appreciable impression on the Trade Returns; the aggregate movements of imports and exports have been fairly uniform during the last ten years, the exports slightly heading the imports.

Austria carries on trade chiefly with Germany, the imports and exports being about level and equal to one-half the total trade. With Great Britain, Austrian exports largely exceed the imports; the staple exports to the United Kingdom are flour and grain in exchange for manufactures and coal. Austria claims by its restrictive laws to render the empire self-sustaining on the principle, but without the malice harboured against "Perfidious Albion," of Napoleon's famous or infamous "Continental System." In this same sense a man may boast of being self-sustained by living on a monotonous diet solely of bread and milk, the produce of his own industry, when by intelligence added to industry he could, through interchange with his kind, have the fruits of the whole earth at his command. We deny any merit to the man, and are ready to attribute his folly to the dementia of ignorance. When such folly becomes transcendent by the practice of a great nation, we can trust only to slow and future enlightenment for a clearer insight into the mischief and loss that attend the breach of economic laws.

GERMAN EMPIRE.

No European state has excited the industrial and commercial alarm of the United Kingdom, so much as Germany, since the Franco-German War, by the development of its natural resources and advancement in the arts of production. Freed from debt and the costs of the sanguinary contest by the colossal indemnity of 200 millions extorted from France; strengthened by the annexation of the Rhine Provinces, Alsace-Lorraine, with an industrial population of 1½ millions of souls, while its hereditary foe was shorn of strength in a corresponding degree; with the dream of an united Fatherland realised in the consolidation of an empire, the conjuncture of circumstances seemed self-suggestive of an age of peaceful industry, and free play to production. To a great extent this promise has been performed. The universal wish of statesmen and people to enlarge the magnitude of German productive industry and commerce did not exist as a passive sentiment, but found its counterpart in strenuous, intelligent, and successful action. Germany, however, was embued with the traditions of twenty-five opposed interests, which, though previously combined, *pro rata*, into the Zollverein or Customs Union, still had to be considered and to remain as a compromise. The Empire, in its aspirations, was a commercial athlete, voluntarily shackled at foot, yet outstripping rivals in the race by its innate vitality and vigour.

Whether British fears were well grounded or groundless, may be inferred from the record of trade between the two countries, taking a few years promiscuously, belonging to the interval named, and given in round millions sterling. The first complete Trade Returns of Germany as a United Empire, are those of 1872:—

	1870.	1874.	1876.	1880.	1881.	1884.	1885.
	mil.	mil.	mil.	mil.	mil.	mil.	mil.
Total value of German Imports .	87	...	191	140⅓	142	164½	149⅓
Total value of German Exports .	76½	120	...	155	154¼	166¾	145¾

	1872.	1881.	1882.	1883.	1884.	1885.
	mil.	mil.	mil.	mil.	mil.	mil.
Imports from United Kingdom . .	43	17½	18½	18¾	18¾	16½
Exports to United Kingdom . . .	19	23½	25½	28	23½	23

The Imports from United Kingdom refer only to British home produce and not Colonial produce.

	1885.	1886.
	miles.	miles.
Miles of Railway . . .	23,000	23,535
Miles of Telegraph . .	51,500	...

	1871.	1875.	1880.	1885.
	mil.	mil.	mil.	mil.
Population	41	43¾	45	46¾

More than a million Germans also emigrated during this decennial period, almost exclusively to the United States; giving in all, an unprecedented increase of population, and incidentally testifying to the growing prosperity of the Empire.

The certain facts that we gather from these figures are that the aggregate foreign trade of Germany doubled between 1870 and 1884, and has reached a total which places the Empire in the first rank of commercial nations. This growth of commercial intercourse has proceeded uniformly, with a close approach to equality between exports and imports. Taking these figures in the gross, and by themselves, the only inferences that can be fairly drawn are, that such a well-balanced trade cannot result in disadvantage to either, but must reciprocally benefit both sides; and that, as the purchasing power of Germany enlarges, so the Empire becomes a better customer of her neighbours.

In the Trade Reports, we notice a difference from the statistics in gross, whereas these nearly balance, the difference in the separate trade shows an average of six millions excess in exports over imports in a total of forty millions; but in these returns the *Colonial* produce of the United Kingdom has not been calculated, these in 1885 amounted to over ten millions sterling, thus bringing the value of the imports in excess of the exports. In other words, the Germans buy of us considerably more than we buy of them; a circumstance hardly to be alarmed about. British fears of German competition cannot be traced to the trade in bulk between the countries, since Germany is one of our best customers, and gives us the best of the bargain; they must therefore rest upon details. Germany was the home of manufactures before England had made an industrial name. One of the first effects of German unity was the development of a national sentiment, bordering on a patriotic passion, to wrest from England the economic supremacy which steam had given her through her resources in coal and iron, and to assume again the ancient leading part which Germany had played in the work of production.

Germany entered upon an enlightened course of action in carrying out the industrial ideas thus stimulated. A system of technical education was instituted, very complete in its details, which furnished the young race of producers and of dealers with a knowledge of the nature and history of the raw materials of manufacture and of commerce, and of the natural resources of their fatherland. Students in the trade schools were embued with the principles of economic science, and inducted into the practical application of scientific processes to industry. Their intelligence was developed by a liberal course of instruction in literature, science, and art. English machinery was introduced and its working supervised by skilled English experts. The economic results of these wise measures were that a generation of productive labourers entered the industrial field gifted with the intelligence to utilise their country's resources, to be less dependent upon England, and to compete with the English, on their own ground, and in the markets of the world.

Germans worked their own stores of coal and iron and imported less. They copied English machinery, and constructed for themselves. Their own able mechanicians superseded British overseers. Industrial enterprise was aroused and was rewarded with yearly enlargements of the trade returns, continued even through the long depression which set in from 1880. German textiles advanced so much in excellence, both as to quality and quantity, as not only to provide far more than previously for home consumption, but also to enter into competition with British goods abroad. Minor manufactures present similar features; but it is mainly upon the great commodities of coal, iron, and textile fabrics, that the German policy is arraigned by that school of economists who would do unto others, not as *we would* they should do, but as they *actually* do unto us.

The progress of Germany, more than that of any other state, has led thousands of half-taught Englishmen to waver in their allegiance to sound economic principles. The case against Germany and the remedies proposed to be applied are "considerably mixed," and the issue is by no means clear. Germany is charged with excelling in manufactures so fast as to put British industry in peril; and, at the same time, with flooding the English market with cheap and worthless goods, in order to undersell the superior work of our own producers. Meanwhile statistics plainly prove that the trade between the two countries does not sensibly diminish in bulk, although in some directions diverted.

German excellence ought not to put British industry in peril, but on its mettle. This craven cry is inconsistent with the charge of the worthlessness of German goods, while it runs counter to the economic maxim that quality, in the long run, must always prevail. Buyers are supposed to have their eyes as intelligently open as sellers. Traders, too, who know the value and character of every commodity in which they deal, are too shrewd to be deceived by worthless articles. Such a plea lays them open to the suspicion of the fraud of palming off inferior goods on false pretences. Cheap foreign goods, though not equal to the best of English make, serve useful purposes, as shown by the growing demand. Spurious qualities do not compete with the best but with the inferior, as we have seen in the case of butterine. Cheap German cutlery, for example, does not influence the sale of that with the genuine Sheffield trade mark. We are not quite innocent of what are known as "Brummagen wares," goods which are most in danger of being undersold by cheap foreign productions. Germans act within their right, a right which we claim and practise more than other nations, of making what we like and selling where we please. Direct fraud must be dealt with by the law, but no government censorship can draw a line where inferior goods shall be forbidden. We must, at least, come into court with clean hands, and clear ourselves of the suspicion of weighting our long cloths with chalk and paste for the foreign market, and shipping to the colonies "unsaleables" at home, before we indict our neighbours for nefarious trade.

Every state justly claims to frame and administer its own commercial code. Our acceptance of the Free-trade principle does not justify any attempt to impose the system upon another state. We are at liberty to revert to restrictions and bring back our trade to its former mean proportions, but public opinion is not ripe for the innovation. Neither will our commercial intelligence suffer us to tamper with the principle; for this is the sum and substance of every device to rectify the so-called evils of foreign competition. Though workmen and employers are engaged in constant struggles with each other, they are always ready to combine against the consumer, under the guise of anxiety on his behalf. "We do not want," say the advocates of a modified fiscal policy, "any interference with the principle of Free-trade, but let it be really free, that is on both sides." Accept the theory, but defer the practice; in other terms, the principle is beneficial, but do not accept any benefit until all parties are agreed. Interdict even those commodities that we should like to have, unless others take from us what they may or may not care for.

Other advocates of change show much solicitude for the consumer by advising that imports shall not be interfered with, but that a guarantee of the place of origin of all foreign commodities shall be officially given to ensure correct description. Read between the lines, these suggestions simply advise that hindrances shall be put in the way of free importation, with a view to increase the cost of commodities, in order that home producers may obtain a better price for their own. In claiming thus a covert protection, one needs to preach to the converted. The device of a local brand or official stamp is as cumbrous as it is impracticable. If the package only is marked there is nothing to prevent English importers from tampering with the contents, while the idea of stamping every toy, pin, needle, and fishhook, is too absurd to be entertained.

A considerable proportion of the goods exported to England consists of articles of food and raw materials, the Trade Returns enumerating corn, flour, bacon, butter, eggs, potatoes, sugar, wine, flax, hemp, and timber. Amongst manufactured commodities, glass and paper figure largely, but of woollen yarns and stuffs Germany contributes barely a third part of the value we receive from France, and our whole imports of woollen goods from abroad do not reach to two-thirds of the value we export, while the last tends to increase.

The only impediment to trade between the two countries consists in the existence of German protective duties, in spite of which, imports from Great Britain actually do increase, though not in the former proportion to those of other foreign imports. In fact, British complaint is rather that of the United Kingdom against itself than against Germany. There has been a large increase of German competition in the British markets in clothing and materials for clothing, jewellery, and plated goods, building materials, cutlery, scientific, optical, surgical, and musical instruments, chemicals, earthenware, agricultural produce, and many other items.

Heretofore, not only were these goods made at home, but for most of them our country had won a reputation for excellence and cheapness. Our alarm really resolves itself into the remarkable charge, (1.) that we buy more than we ought from Germany, although Germany buys still more from us; (2.) that our consumers, tempted by low prices, buy goods abroad which they could get at a higher price at home. The fault of the German is not "of the Dutch," "in giving too little and asking too much," but the strange one of giving too much for money. Neither patriotism nor legislation can withstand the cheapest market. Consumers will continue to make the best bargains even when by paying more they "encourage native industry." One sole resource remains to the British producer,—by improved processes and methods, to produce as cheaply as the Germans and beat them in the fair field.

The effect of low prices is observed, perhaps, even more abroad than at home. English cloths, formerly commanding a large sale, have been superseded to a large extent by those from German looms. German glass-makers have possessed themselves of the market for common glass, which was once wholly English. Nails also, clocks and watches, and a variety of fancy articles, of German manufacture, obtain a preference abroad. No service is rendered to home produce by the effort to decry or depreciate German goods, inasmuch as they are, in various cases, fairly equal, and in a few cases superior, to English make at the same price. The taste and neatness with which the German article is presented to the public often of itself accounts for preference.

Summarising the reasons of Germany's commercial advance and of the relative falling off of British trade, we observe:—

1. Germany emerged out of the great war of 1870 a new state, with new laws, wants, views, and aims. The Empire received a great impetus through the sweeping away of obsolete restrictions, the adoption of a common commercial code, a common coinage, and a uniform standard of exchange. An enormous benefit accrued by incorporating the rich manufacturing resources of Alsace-Lorraine into the Customs' Union. Further, the colossal French indemnity permitted the federal governments among whom it was distributed to set free an amount of private capital estimated at 135 millions sterling, which had been invested in Government securities, loans, and railways.

2. German production has vastly improved in quality as well as quantity. The state, particularly through its Consular Service, affords great encouragement to the home industries. A special advantage must be ascribed to the practical technical education of the people, their instruction

in modern languages, and the habit of travel, which makes them familiar with the trade usages of other countries, and enables them to imitate and rival their productions. A British Consul remarks on this point:—"It stands to reason that a commercial traveller or agent enjoying these advantages is more than a match for one who can only recommend his wares through the medium of an interpreter, or by the mere sight of his price list. If we hope to cope successfully with German commerce, we must adopt her excellent and intelligible plan of educating our foreign commercial agents."

Great Britain appears to display unreasoning fears in face of the fact that Germany shared severely during the trade depression of the "eighties." According to another of our Consul's reports of the time,—though the quantity of trade done by Germany grew year by year,—prices were so low as to leave scarcely any profit either to manufacturer or dealer. Again, though German industry has displaced English products in German markets, in the iron, textile, and chemical branches of trade, still, with the exception of rolled iron girders, now imported from Belgium, no trace could be found of the diversion of British trade to other countries.

A feature of German history entirely new, since the unity of the Fatherland, is seen in the passion which has developed for colonial possessions, and first taking effect in 1884. Apart from the British Islands, Germany sends out more emigrants annually than any other European country, but hitherto these emigrants have shown greater capacity for being absorbed in other nationalities than in founding colonies of their own. By "purchase" of the natives and something like "sharp practice" towards France, Spain and England, Germany has nominally acquired dispersed dependencies recently, extending over nearly half-a-million of square miles, confined to Africa and the Pacific, none of which, as yet, repay the cost of annexation and administration, or are of a character to tempt settlers, although with the opening of the Panama Canal, the Pacific stations may have a future of development before them not easy to forecast.

UNITED STATES.

The great Anglo-American Republic, constitutionally so completely opposed to the imperial institutions of Germany, is yet, in its commercial system, the counterpart of that Old World Empire. Differing by the distance of the poles, these grand representative federations of the two hemispheres furnish such remarkable resemblances in contrast, that their social development, respectively, engages attention as a study of the highest interest and profit. In both countries we see an energetic and enterprising race, advanced in intelligence, and equally inspired with a patriotic ardour to promote their national wellbeing by the systematic improvement of their productive powers and zealous cultivation of their natural resources.

Two schools of economists are at variance in each country on the first principles of commerce, the one, long and still in the ascendant, advocating restricted, and the other unrestricted foreign intercourse. America has an advantage over Germany in its sea-board and the vast expanse of its territories, three-fourths still awaiting a population. Its resources are practically limitless, and economic errors cannot be fatal to progress, though impeding its rate, where exuberant abundance rewards productive industry.

The total Trade Returns of the United States between 1862 and 1872 multiplied nearly threefold. In 1872 they exceeded a billion dollars, since which date they have fluctuated yearly, several times, reaching the extreme of over 1½ billions of dollars. The striking feature of these Returns is that the first decennial period exhibits imports uniformly in excess of exports, and, since then, this relation has been reversed, exports advancing upon the imports by yearly degrees until they reached a considerable excess. The disparity in the imports and exports of the trade with the United Kingdom in recent years is much more marked. Except when bullion and specie have formed an unusually large item in the Returns, the imports have remained nearly passive and stationary, while the exports have considerably increased.

With the fast growing population of the United States we need to go below the surface, from what is seen to what is not seen, in order to account for the surprising phenomena which these figures present. One's convictions are formed immediately, that such absolute change of character in the trade of a wealthy and prosperous state, cannot be the due sequence of the commercial enterprise of a people whose wants continue the same, while the power to satisfy and gratify such wants enlarges with time. The inference one would naturally draw is, rather, that trade would proceed by leaps and bounds, but on the same lines, and that its altered character must be the consequence, whether for good or ill, of interferences from without.

Enquiry brings to light that the relative diminution of imports is coincident with greater stringency of the fiscal burdens imposed upon imports, expressly to produce the effects which have been so successful. By a tax upon imports, it is argued, that fairer play is given to native industries, by enhancing their values and therefore leaving a larger margin of profit to the home producer—the consumer paying the difference. This course, if right, contravenes the economic principles that the *surplus* of one country should exchange with the surplus of another, and that consumers should buy in the cheapest market, whereas they are forced to buy in the dearest. Pursued to its logical length, a tax on baker's loaves would be justified, in order to encourage home-made bread.

A journalist returning from Australia thus describes his first experiences of the Protective system of the States,—

"The day before we arrived at San Francisco, every passenger was served with a blank form, which he was warned would be regarded as of the nature of an affidavit or statutory declaration, and that he would be liable to a prosecution for perjury—besides another prosecution for defrauding the Customs—if he put in it anything that was not true to the letter. This paper had to be filled in with full particulars of the holder's self and belongings—age, sex, profession, birthplace, place of residence, with many additional items. Also he had to describe each item of his baggage, whether trunk, bag, or portmanteau, and give an idea of each's contents. On the official form was a list of the articles which, under the Protective laws of the United States, are subject to import duty. All articles of apparel not in actual wear, all articles of jewellery, all articles of manufacture, all articles of every known description, from a pair of baby's boots to a bundle of cigars or a bottle of whisky, from a quire of paper to a box of cough lozenges or a packet of mustard plaisters, are here subject to duty if declared, and seizure (and something beyond) if discovered. You are solemnly warned that if you have two watches you must declare one of them, and that it will be for the officers to judge whether or not the personal jewellery of anybody is of a kind that calls for the imposition of a penalty. Protection is, indeed, a great thing—for those who benefit by it. On this Sunday morning I could have wished for nothing better than to see half-a-dozen of those who howl for Protection on our side, laden with whatsoever is allowed to come free into England, and handed over to the tender mercies of the United States inquisitors. Also I should like to ask those Americans who complain aloud about the Customs regulations at Liverpool, what they think of their own villainously inquisitorial regulations. America levies duty on fifty things to one thing which is dutiable on entering an English port; so the American who inveighs against what happens to him in an English Custom House is either very ignorant or very malicious. Does it not seem absurd, so that Brown, a tailor, and Jones, a shoemaker, of New York or San Francisco, shall not bear the pangs of foreign competition, that the coats and trousers, the boots and shoes, and the everything else, of all folks who land East or West shall be thoroughly overhauled, at an enormous inconvenience to travellers, and a still more enormous expense to the States which have to pay for this system of surveillance and espionage? A young lady who was travelling from Auckland to England had three small specimens of Maori woodwork, little things about four inches square, in one of her boxes. These were taken away, because they were manufactured articles, and must not be admitted free, in justice to native American manufactures!

"On the Saturday when I received my paper I filled it up, and on the Sunday morning, full of the thoughts that I was at last entering upon the abòde of the only free people the world now possesses—that I was already within touch of an official whose emblem and ensign was the Star-spangled banner—I, in a mixture of fear and gratitude, handed in my document, answered a few short sharp questions, and then had it returned to me. This being done, and as I had virtually (and legally) sworn I possessed nothing dutiable, I thought my ordeal was over, or as good as over. Foolish man! But what I and others with me really went through must be reserved for another chapter."

The commercial policy of America derives reciprocal illustration from the results upon the home industries in the decennial period closing the third quarter of the century, and upon the foreign trade in the similar decennial period at the beginning of the fourth quarter.

Among the "indirect losses" for which compensation was claimed from Great Britain by the United States was "the loss in the transfer of the American commercial marine to the British flag." American statesmen went so far as to hold Great Britain responsible not only for the actual decline in the States' tonnage, but also for the stoppage of that annual increase in tonnage, which, they assumed, would have been realised but for England's default. Figures adduced went to show that between 1860 and 1866 the foreign merchant tonnage of the United States had sunk from over 2½ millions to under 1½ millions of tons, while that of Great Britain had risen by an amount almost exactly equal.

Our then foreign minister, Lord Clarendon, in reply to these far-reaching and incommensurable claims, asked a shrewdly modest question, which, at this lapse of years, still remains to be answered. "Is not," he enquired, "a good deal of the alleged loss to be attributed to the high American tariff, which makes the construction of vessels in American ports more expensive than shipbuilding in England, and has thereby thrown so large a proportion of the carrying trade into English hands?" "There must," he adds, "be some such cause for it, or, otherwise, American shipping would have recovered its position since the war, instead of continuing to fall off."

The chapter of political economic history of the period was completed by able financiers who protested against the whole commercial policy adopted by the United States, but singled out the shipping interest as that which had experienced "the most terrible blow of all, the flag of the

American commercial marine having been almost swept from the ocean."

Great Britain profited, though not exclusively, by this decline for which she was held responsible. Treasury statistics make it appear that, "prior to 1862, the tonnage of American vessels entered at the ports of the British Empire was double the tonnage of British vessels entered at ports of the United States; but that since 1868, the tonnage of British vessels entered at ports of the United States had been double the tonnage of American vessels entered at ports of the British Empire." Nearly 80 per cent. of all that came in or went out of the United States in 1870 was carried in foreign vessels or vehicles,—a marvellous revolution in the course of trade, and ascribed to the highly protective policy which had characterised the fiscal legislation of the United States since 1860. The cost of iron had been so enhanced by excessive duties on its manufacture in the United States as to become the principal impediment to shipbuilding. It was calculated that from this cause more than forty thousand workmen were deprived of employment in connection with the single industry of the building, equipment, and sailing of sea-going vessels, apart from the construction of vessels for use upon the inland waters. An extreme case, ludicrous, if not so serious, of the penalties inflicted upon shipbuilders, was afforded where it was found cheaper to send a vessel from Boston to Halifax for the sole purpose of being sheathed with copper, than to have the work performed by American workmen in an American port. The excessive cost of materials due to protective taxation, is not the only cause which makes it impossible for American shipbuilders to compete with foreign rivals, for the same fiscal policy has inflated, to an excessive degree, the price of the necessaries of life, and necessitated thereby an enormous artificial rise of the operatives' wages; for it is not the money-wages, but what these money-wages exchange for in kind, that constitutes the real wages of labour.

By a refinement of protective government, American merchants who would find it more profitable to buy ships abroad, are not permitted to do so. Foreigners can obtain ships in the cheapest market, and carry on trade between the United States and any other country, under their own national flag. Americans can only employ home-built vessels, and are liable to pay a duty for any repairs executed in a foreign dock-yard "equal to one-half the cost of the foreign work or material." The wonder is, not that shipbuilding and ship-owning, thus weighted, thrive so little in the United States, but rather that capital is not still more rapidly withdrawn from this area of labour. Only by the admirable ingenuity of the Americans in the invention and application of labour-saving machinery, have they been able to counterbalance the relative cheapness of labour on the Mersey and the Clyde. It has not, however, sufficed to counterbalance the difference between British Free Trade and American Protection, which has been pushed to such an extreme that new capital is prevented from seeking investment in marine pursuits; and, as old capitalists disappear from the scene of labour, no inducement is left to renew their interests and fill their places. Under a policy specially designed to stimulate and encourage a native industry for which the natural resources of the country are unparalleled, we observe the coasting trade to languish—a choice preserve whence intruders are warned off—and the foreign trade to slip from American hands and die out.

The United States ranks only next to the United Kingdom in the vastness of its industrial and commercial relations, yet the perennial conflict of economic principles which divides the Republic is a more significant feature in its annals than is the magnitude of its figures of trade. The controversy between the doctrines of Free Trade and Protection has ever been embued with an excess of latent heat, ready with the least friction to burst into flame. The two great political parties in the state, the Democrats of the South, and the Republicans of the North, were not more divided on the subject of Negro slavery than on that of Free Trade and Protection, and it is not easy to apportion between the two influences their respective shares as causes of the fratricidal civil war of 1861, which was certainly embittered by the heated debates in Congress on the passing of the new Morrill Tariff Bill, nearly prohibiting commerce with England, at the commencement of that sanguinary struggle.

Physical circumstances divide the northern and southern States in opinion. The New England States are essentially manufacturing, the Southern States as essentially cultivators of the soil. The Southern States needed manufactures in exchange for their produce, and resented the permanent action of the manufacturing States in maintaining a system of prohibitive dues which obstructed interchange, to the sole advantage of the North States, while gravely detrimental to the trade of the South. Only by the Missouri Compromise of Henry Clay in 1820, on the subject of slavery, which left the Southern planters at peace with their domestic institution, had the Battle of the Tariffs held a truce. As States, added to the Union, gave an undue majority to the Republicans or Abolitionists, and reversed the political status of parties by the election of the Republican President, Abraham Lincoln, the idea of secession found practical expression. The New England States, which, when opposed, in 1812, to a war with Great Britain, had themselves threatened to secede, now inconsequently denied the right or power of secession to their sister States, and zealously responded to a proclamation of civil war to maintain the immutability of the Union. The South succumbed to the power of the North, and the old grievance of restricted trade was aggravated. Protectionist principles have been "a main plank of the platform" in elections for the Presidency and of the Governors of States, and in those States where the manufacturing interest predominates, the Republicans have borne almost undisputed sway.

With the development of Manitoba, Great Pacific Railways, and Imperial Institutions, England appears disposed to increase rather than diminish her responsibilities as an American power, and regards with keen interest the struggle between the two strong parties of Democrats or Free-traders and Financial Reformers, and the Federals or Republicans on the continent beyond the Atlantic. Pennsylvania, with a potent voice in electoral matters, is the stronghold of the Federals, while the cosmopolitan population of New York is swayed to and fro by a near balance of the powerful parties. The energy, political skill, and judgment of the Democrats, moving forward in the direction of lower duties, and a tariff for revenue only, not for Protection, and thus favouring a freer importation of English goods, were not rewarded with distinct success until 1884, when, the first time for many years, a Democratic President was elected, pledged to financial reform, with a following forming a working majority in the American House of Representatives. For a brief period, the reform of revenue scandals was hopefully in the ascendant; but before half the Presidential term had expired the Democratic majority was converted into a minority by the intervening election of a new House of Representatives, and the Republicans were thus armed with the power to nullify and obstruct legislative reforms and dominate the Executive, during the remainder of the Presidential term, while forbidden, through the rigid system of the American constitution, to assume the responsibilities of office.

Matters of grave moment to England were settled for the time being by this reversal of political sentiment and power. The Republicans when defeated were more surprised than dismayed, and had played a return game with success, in favour of revenue abuses. The campaign they conducted, forced everywhere, side by side, two main issues—the protection of American manufactures by high tariff duties, and the liberty of unlicensed fishing in Canadian waters for the American fishermen of New England; maintaining throughout a tone hostile to England. The Democratic administration was assailed as subservient to English interests on the question of cutting down the tariff; and denounced for travelling beyond its authority, in agreeing to extend the time fixed by a joint resolution of Congress, for the termination of the Fishery Clauses in the Treaty of Washington. Protectionism in America has passed through such strangely inconsequent phases as to prove, though not to convince the manufacturers, that it is purely an empirical device of half-taught economists, and establishes no claims to the rank of a scientific commercial system. Nevertheless, with divided counsels in our own country, on Free Trade, Fair Trade, and Protection absolute, it is not for us to cast stones at economic errors prevalent abroad. No other country can, so well as America, afford to practise vicious doctrines, because of the boundless scope for expansion of its vast and still unpeopled territory. Over this wide extent of the Union trade is perfectly free, from the national conviction that unrestricted commercial intercourse promotes the general well-being, and that each and every state reciprocates the benefit. Yet, if the Confederate States had succeeded in their attempt at secession, the hostile camps would only have changed their militant for a commercial character. Free Trade would have ruled in the South, Protection in the North, and on the same ground of promoting well-being. Let us conceive Canada to be absorbed in the American Union. As a certain consequence, the restrictive laws enforced by these states, respectively, to promote their well-being, would be at once in favour of perfect free trade, to accomplish the same purpose. Let us conceive the extreme length of the thirty-seven States of the Union, disintegrating and becoming independent of each other. The commercial result would be that the agricultural states would be free traders, the manufacturing, protectionists; and the well-being, previously sought on a common system, would, with equal faith, be striven for through quite antagonistic principles. Lastly, this Herculean Union, with absolute free trade over thirty-seven states, many of them kingdoms in area, professes to believe that, to admit any old-world state to a share in its commercial privileges, must mean ruin to the national industries. Even the German Zollverein is more liberal, admitting, by mutual concessions, several of the outside states to an equality of transit rights and tolls.

Advocacy of Protectionism in the United States is largely political; appealing to the selfish interests and zeal without discretion of the popular vote, by the seekers of office and power. The half-perception by the working-classes, of economic principles, lays them open to the misleading statements of prejudiced and interested aspirants to legislative functions; and tirades addressed to the masses in states like Pennsylvania or elsewhere, to the effect that Free trade is as mischievous and criminal as slavery, are received with an enthusiastic applause, which greater intelligence can alone be looked for to sober down. The perversity of thought which accompanies half-truths or halfuntruths, is observable in the popular and unreasoning jealousy of England, the malignant home of free trade. Though, logically, a people upholding protectionist principles as a great productive agency and commercial blessing, should pity the benighted plight of rivals who pursue an ignorant, delusive, and losing policy of free trade, yet, if zeal for Protection anywhere flags, it is only necessary to announce that the pestilent English Free Trade has subscribed large sums in order to undersell and cripple American industry, for the pseudo-fervour to revive in full force. This familiar social phenomenon betrays covert convictions that free trade *may*, after all, be right in principle, and is, strangely, a source of danger to the counter policy of restriction. Englishmen can regard the economic heresies of the American Union with equanimity, and accept the conditions of hostile tariffs; for were not the enterprise of its citizens wilfully curtailed and fettered by restrictive legislation, the magnificent resources of the country, the matchless means of communication in the natural waterways and system of railways, exceeding sixfold that of the United Kingdom, and the rapid development of a population which promises to start the twentieth century with a hundred million souls, would combine with open American markets to stimulate a more formidable competition than England has ever heretofore been called upon to encounter.

BRITISH POSSESSIONS ABROAD.

ASIA. BRITISH INDIA.

British annals have closed the chapter of conquests. A desire animates the United Kingdom to consolidate rather than extend the component parts of Greater Britain beyond the seas, and our policy is directed to this end. Yet, an Empire with authority wielded in every latitude and longitude, with an influence also ubiquitous, is really less free than a small and unimportant state to lay down a hard and fast rule for guidance, from which it shall under no circumstances ever swerve. Willing or unwilling, occasions arise when for strategic purposes, or for safeguarding existing colonial interests, as well at the behest of insular races in peril of other powers, and as the issue of war, the penalty of evil-doing, annexations of territory are thrust upon the Empire as an imperative public duty. During the last quarter of the nineteenth century, the policy of non-interference abroad has directed the counsels of the Colonial Office, and accessions of territory have yet taken place to an extent which, to our neighbours eager for dependencies abroad, would form an enviable colonial system.

To be classed in the same category, though not an actual accession of territory, was the completion of the transfer, which took place in 1858, of our Indian Empire to the Crown, by proclaiming the Queen in 1877 Empress of India; followed in 1878 by our taking possession of Cyprus, and in 1885 by the deposition of Theebaw and the incorporation of Burmah in the Indian Empire. This state at a stroke added nearly 200,000 square miles of productive territory to our Indian possessions and 3½ millions of souls to our Indian fellow-subjects; at the same time opening up to the civilising influence of British commerce a country which had been shut off from intercourse by the eccentric atrocities of its demented ruler; a country rich in produce, both from the vegetable and mineral kingdoms (the petroleum of Upper Burmah is especially rich in paraffin), while the capacity for rice and cereal growing seems unlimited; for the former crop there are already nearly 3½ millions of acres under cultivation. The rapid push of railway work seems to point to a future of great commercial interest.

Under the stimulus of practical freedom, Indian trade progresses at a rapid rate, having risen from a gross total, in 1867, of 86½ millions sterling to 152 millions in 1886. The only exceptions to free intercourse are liquors and the government monopolies of opium and salt. A crucial illustration of the effect of removing restrictions is afforded in the imports of cotton manufactures, the removal of the duties on which was expected to annihilate the native industry. Since 1876, these imports have more than doubled, while Indian manufactures have improved rather than suffered, and all have benefited by the great cheapness of the fabrics.

The enormous resources of India have been proved in the recent development of wheat culture, the export of which grain now equals even that of rice. Indian wheat now ranks with cotton, opium, rice, and seeds among Indian total exports; and, if the same rate of trade expansion continues, must, at an early date, take the primary rank as an Indian product. Only a few years since, wheat did not enter into the Trade Returns of India, and its first appearance in the British Corn Exchange was regarded as a curiosity. The grain was then inferior, small, hard, and mixed with soil refuse left from the primitive fashion of treading out the corn by the feet of oxen. Thrashing machinery has removed this defect, and every year's shipments improve in quality as well as bulk. Indian wheat belongs to the class of hard and dry wheats, containing an excess of gluten or nutritive matter, singularly suitable for making a good blend in milling with the moister new English wheats. These Indian supplies, competing with the floods of wheat from America, have been an effective cause of bringing the price of wheat to touch the lowest limit it has ever reached, and of arresting the extreme ebbs and flows in the market values, formerly characteristic of the corn trade, but which are never likely to recur.

Shipments of Indian wheat, with their boundless capacity of expansion, are the result, directly and exclusively, of free trade in corn. They are an emphatic response to the apprehensions that, as the English are changing from an agricultural to a manufacturing race, our sole reliance for food substances will be in unstable foreign resources, liable at any time to be seriously curtailed or quite cut off by political estrangements and war. India, without calling upon Australia and New Zealand, obliges us to confess that these anticipations of evil have very little solid ground to rest on. Were the ports of the whole world closed to our merchantmen, our splendid inheritance of dependencies would furnish an abundance of the necessaries, comforts, and the luxuries of life, and minister to every need, in the varied raw materials of food, clothing, means of shelter, and of social and intellectual requirements. India alone, as in the Lancashire famine with cotton, would replace America with its seas of waving wheat.

Indian exports have normally been considerably in excess of imports. This disparity is much greater when we take into account the amount of treasure imported, which is computed as merchandise, because silver alone being used for coinage, gold is converted, after the Oriental manner of saving, into personal ornament. The balance against imports indicates that the poverty of the teeming people left them unprepared to make large demands for British manufactures. A purely reciprocal trade, however, must tend to a balance. It would have been easy to infer beforehand the issues which the facts of Indian commerce, year by year, the more vividly illustrate. The imports of gold are uniformly being replaced by those of commodities, and a growing demand is made for British manufactures. The movement is one which must reasonably continue until the one class of commodities shall be the average counterpoise of the other. The rate of progress towards this consummation will be the gauge of the growing prosperity of India, which prosperity, in its turn, will reciprocally accelerate the rate of progress. One happy evidence of the well-being of India under British rule since the mutiny, is afforded in the rise of labourers' wages throughout the Empire. The scanty dole of two annas a day has, on the average, quadrupled in one generation; and, as wages must be paid out of produce, the resources of India must have been utilised to a corresponding extent.

The stupendous magnitude of British India so overtowers the relative importance of our other oriental dependencies, that their commercial value is apt to be comparatively disregarded. Yet their number, extent, resources, and generally flourishing condition, are an integral element in the grandeur of the British colonial system and our imperial power abroad. They add to the magnificent figures of our Indian trade an annual sum of many millions sterling, the component parts of which have increased in relation to every settlement; and in such instances as those of Ceylon and the Straits Settlements, have more than doubled within the last quarter of the century.

A special feature of these eastern possessions is that, like India, they are not colonies in the usual sense—the home of settlers, with self-government and independent legislatures—but crown colonies, ruled over by the Queen, through governors of her own appointment, and official instead of elective legislative and executive councils. By far the foremost of these dependencies are Ceylon, the Straits Settlements, and Hong Kong, whose trade with Great

Britain absorbed in imports and exports in 1885, fourteen and a half millions sterling. Aden and Socotra owe their importance to their position on the direct route to India, serving as stations for our mercantile marine, whether for coaling or defence. The island of Perim, a dependency of Aden, is of a like strategical character; its few exports being first gathered from the neighbouring shores, and its imports confined to provisions, water, and salt. Labuan, an island of the Malayan Archipelago, continues to be a settlement of varied but undeveloped resources, with scarcely more than a small local commerce, not entering into the statistics of British trade.

The British have claimed for an indefinite period a quasi-authority over Borneo, but it was not until 1881 that the shadowy was replaced by substantial possession, in right of a Royal Charter granted to the British North Borneo Company, conferring full sovereign rights over a territory, including islands, of 30,000 square miles. Exuberant in every form of the richest tropical produce, both plant and animal, together with untold stores of precious and other minerals, the settlement only awaits British enterprise to secure an enviable future in the annals, already marvellous, of our colonial development.

AUSTRALASIA.

"In the closing years of my life," says Mr. J. A. Froude, in an early chapter of his "Oceana," "I have secured for myself a delightful experience. I have travelled through lands where patriotism is not a sentiment to be laughed at, but an active passion; where I never met a hungry man, or saw a discontented face; where, in the softest and sweetest air, and in an unexhausted soil, the fable of Midas is reversed, food does not turn to gold, but the gold with which the earth is teeming converts itself into farms and vineyards, into flocks and herds, into crops of wild luxuriance, into cities whose recent origin is concealed and compensated by trees and flowers; where children grow who seem once more to understand what was meant by 'Merry England.' Amidst the uncertainties which are gathering around us at home, a future so obscure that the wisest man will least venture a conjecture what that future will be, it is something to have seen with one's own eyes that there are other Englands besides the old one, where the race is thriving with all its ancient characteristics. Let fate do its worst, the family of Oceana is still growing, and will have a sovereign voice in the coming fortunes of mankind."

These eloquent words are reflected in the material progress of our Australasian colonies, as testified by the most recent figures of trade and the development of colonial industry, beside which the productive energies of old established empires appear insignificant. Between the beginning and the middle of the fourth quarter of the century, the aggregate annual value of Australasian commerce advanced from about 85 to 110 millions sterling, or nearly 30 per cent., of which one half was with the mother country. These magnificent results would be greater but for the protective principle which prevails for the encouragement of colonial manufactures. Such, however, is the need of British fabrics and other goods, and must continue to be the need of regions upon whose resources scarcely an impression can as yet be said to have been made, that the imports, in face of the burdens which they have to bear, closely approximate the exports in value.

The extent of the Australasian Settlements are computed at 3,170,000 square miles, the whole of which area, excepting rather less than 140,000 miles occupied by Tasmania, New Zealand, and Fiji, is absorbed by the island-continent of Australia. During the period under review, the colonists have increased in numbers from 1¾ millions to about 3¼ millions of souls, and their wealth from the three kingdoms of nature has grown in a greater ratio than the population. The number of sheep has augmented by 50 per cent., and, including those of Tasmania and New Zealand, approach the marvellous aggregate of 75,000,000 head. As a wool-producing country, Australia has already risen into pre-eminent importance, its five colonies all making the fleece their leading export, sending from their shores yearly, with the supplementary contributions from Tasmania and New Zealand, freights to the astounding extent of between 300 and 400 millions of pounds avoirdupois.

Food products, animal and vegetable, taken in the aggregate, surpass in extent and value the export statistics of textile fibres; though these raw materials of clothing include, besides wool, flourishing growths of cotton, silk, jute and other fibres of the finest kinds. Cotton favours the more tropical parts of Australia, and no definite limits can be placed to its cultivation. Silk culture has developed a new and important industry, making Australia, year by year, more nearly a chief source of our supplies of the fibre, whether in the form of the most splendid cocoons or of thrown silk.

The cattle of Australasia have multiplied in full proportion to the sheep, and as the difficulties of transport to our shores have been gradually surmounted by improvements in the arts of preserving flesh foods by concentration, or fresh cooked in tins, and by fitting vessels with cold chambers for frozen carcases of oxen and sheep, an enormous dead meat trade has sprung up, which, even now of national dimensions, must exercise in the near future an increasingly appreciable influence upon the economy of our food resources. New Zealand has been very active in this trade, sending single cargoes to Liverpool of frozen sheep exceeding 20,000 in number.

Grand as are the returns of these food substances, they are overshadowed by the statistics of wheat produce, the staple food export of the colonies. Wheat in abundance, vieing with the harvests of America, and in excellence unsurpassed in any part of the world, pours into British ports from Australia, removing the very shadow of the fear of scarcity, and acting as a main factor in the contentment of the masses of our population through the exceeding cheapness of bread.

Of minor food industries, only minor in presence of the vast transactions in the meat and wheat trades, are those of the vine culture, with the production of wines, and fruit raising. The Colonial Exhibition in London, 1886, brought these industries to the fore-front, disclosing, to the surprise of the mother country, how firmly they had become rooted, and at the same time receiving a commercial impulse, such as could hardly have been achieved in any other way. The publicity given to Australian wines by the Exhibition could not have been more opportune, since they shared the benefit of the new treaty with Spain of lower import duties. Resting on their merits they created an immediate demand beyond any ever before known. Scientific experience will further improve the vintage. Every known variety of European wines was represented, for the Australian vines were propagated from cuttings of the choicest plants in all the wine-producing countries. Australian producers must, however, as yet, admit that their Clarets, Burgundies, Champagnes, and Hocks, are but excellent imitations of the real article. The vine is so sensitive to variations of climate and soil, that adjoining vineyards often yield wines very distinct in quality, and each district possesses its special growth. Changing the site of growth tends to the development of fresh properties or to the disappearance of old properties, and in the end to a specific variety of produce. In the experimental stage, the Australians have grown different vines and manufactured different wines on the same vineyard. Industrial enterprise and intelligent skill will lead them to select from their vineyards those vines most favoured by local conditions, and confine their attention to the production of special brands of natural Australian wines, whose excellence shall need no foreign name.

Although, practically, there are no indigenous edible fruits in Australia, yet all the introduced fruits from the temperate and semi-tropical zones, such as the orange tribe, pomegranate, passion-fruit, banana, pine-apple, and many others, thrive in amazing abundance. The cultivation of the orange dates back to 1818, when the Rev. R. Johnson grew the first examples in New South Wales from seeds brought from Rio Janeiro. The largest orange trees in the world are now found at Paramatta, where upwards of 10,000 oranges have been gathered in a season from a single tree. Still more remarkable for its wonderful fertility is the colony of South Australia, which produces in enhanced perfection, not only all the fruits and vegetables of England, but lavish crops of the finest wheat and grapes—the vintage of 1884, yielding 473,535 gallons of wine, 1885 over 600,000 gallons, and there is every prospect of these quantities largely increasing. Speaking of the results of the Colonial Exhibition of 1886, a journalist of the time remarks, with regard to our pleasant prospects of fruit supplies—"At periods when northern fields and orchards cannot supply our tables, the antipodean colonies will forward every kind of fruit, and mankind will at length realise the full benefit of living on a globe, one side of which must always have summer. Heretofore the northern hemisphere has been shut off from the southern, since it was impossible to transfer the stored up sunshine, in the shape of juicy fruits and fresh vegetables, from the tropic of summer to the zone of winter."

The cold storage principle has practically accomplished this fact, and opened out new gardens, richer than were fabled in Hesperides, and, so far as the fruits of the earth are concerned, has abolished winter.

Experimental consignments of oranges from Sydney and Adelaide have encouraged an assurance that, with existing supplies, we shall be able to obtain this succulent and refreshing fruit all the year round, arriving as they may in July and August, when the markets are bare of supplies from other quarters. Virtually, seasonal fruit, as a descriptive term, must lose its significance, for every clime will follow with its tribute of sweet treasures until the visionary Horn of Plenty, ever pouring forth its gifts and ever replenished, merges in a materialised fact.

Our Australasian dependencies are colonies in the exact sense, that is, settlements of our fellow-citizens, who have emigrated from the mother country in view of making a permanent home in these distant parts. They differ from crown colonies in possession of the right and enjoyment of self-government, exercising authority, through elective local legislatures, in all matters other than such as are of exclusively imperial character. With institutions modelled upon those of the home country, the colonies are virtually republics, controlling their own taxation and commercial policy, and acknowledging only an hereditary Presidency vested in the British crown, represented by Governors of the Queen's appointment. The defence of the empire and levying war, being imperial prerogatives, the colonists are relieved from the maintenance of standing armies; but, at the same time, are debarred from conquests and annexations of territory.

The sentiment of loyalty, fostered by free institutions and self-dependence, though sometimes strained, tends to the consolidation of the colonies with the United Kingdom into one vast empire, and no instance exists of a colony ever desiring to sever its connection with the parent state, since the Declaration of Independence by the United States of America. The material advantage of these "free states under British protection" is all on their side, since they are spared the main burdens of self-defence. A new-born passion of Germany and France to acquire colonial possessions has impressed the Australian mind with the remote danger which they incur of being plundered by enemy's cruisers should Great Britain find herself at war with a maritime power.

German annexations, unexpectedly announced, have been confined to Africa and the Pacific. By the oversight of England to ratify a treaty cheerfully signed in 1876 by the chiefs of various territories along the African coast, placing them under the rule of Queen Victoria, the Germans were enabled, in 1884, to step in and appropriate their lands. Subsequently the German flag was planted on some of the islands of the Pacific, which have since been named the Bismarck Archipelago, and sovereign rights have been claimed over other groups. Anticipations of secret and high-handed proceedings of this nature had raised a desire with the Australians, especially the settlers of Queensland, to secure themselves against aggression, by annexation of the outlying groups of the East Indian Archipelago, and led Mr. H. M. Chester, in 1884, to overstep the bounds of legality and take formal possession of New Guinea in the name of her Majesty and of the Government of Queensland. This enterprise was necessarily disavowed by the British Government, and by a friendly arrangement this fine island has since been divided between Germany, which takes the northern half, and England, which takes the south.

These incidents gave shape to the great idea of Federation, without, however, clearing the course of its manifold practical difficulties. The belief amounts to conviction that a *modus vivendi* will eventually be found of uniting Great Britain and Greater Britain into one potential representative Empire for mutual defence, community of interests, and the advancement of the civilisation of the world. Important progress was made in the welding of the brotherhood of blood, during the Soudanese campaign, when Canadian and Australian Volunteers fought shoulder to shoulder with British soldiers, to uphold the honour of their common flag, and to prove that the glory has not departed from our race whether developed under the Southern Cross or Orion of the North.

The initial difficulties of Federation have been surmounted in the grand example of the Canadian Dominion. The Act, constituting the Dominion an Empire as large as Europe, was highly permissive, from the unwillingness of England to press any colony to join until satisfied that it would be personally advantageous; nor would the Act have ever been inscribed on the Statute Book, as a measure of practical politics, if the colonies of British North America had not themselves asked for it. Secession was made easy for any colony that did not care to recognise the dominant authority, preferring to return to its own well-developed parliamentary institutions. The Federation was voluntary, the resultant of conference and concessions between states having varied interests; and, while it seemed almost impossible to hope for strong and persistent united action, under an experimental, tentative, or "Enabling Act," yet the power reserved to the colonies to revoke their own act and deed, if need arose, offered the strongest inducement to union. Separate interests kept some states back for a few years, and Newfoundland still keeps out; but the law of the smaller to gravitate to the larger mass, prevailed in turn upon Manitoba, the North West Territory, British Columbia, and Prince Edward's Island, and it seems inevitable, sooner or later, for Newfoundland, with its dependency of Labrador, to yield to the influence of attraction.

The success of the principle of Federation in Canada has been the proximate cause of the establishment of a "Federal Council" for Australasia, to consist of representatives of the seven Australasian colonies, including New Zealand, and is intended to deal with the external relations of the greater Southern Empire, especially in connection with the Pacific Islands; to prevent the influx of criminals into any part of Australia or New Zealand, and to control the fisheries beyond territorial limits. Internally, the Federative principle will render civil and criminal processes and judgments, issued in any one colony, effective all over Australia; give uniformity to the laws concerning marriages, patent rights and copyright, and regulate commercial policy.

Out of these tentative beginnings a firm Federation may gradually arise, although greater obstacles than confronted Canada, spring up in these more widely-dispersed communities to obstruct the trial cruise of the new measure in Australian waters.

New South Wales claims to be the "Premier Colony" of Australia, and is disposed to resent the pretensions to equality of youthful settlements such as Queensland and Western Australia. Federation would be shorn of half its advantages were a colony with the wealth and power, the grand past and grander future, of New South Wales, to stand aloof. The Sydney Ministry and people rightly cherished the independence of their Legislature, which they could not endure to see swamped in a paramount Council; but they recognised the fact that Federation was inevitable, and must involve mutual concessions.

New Zealand, which had indulged the dream of a local Confederacy, of which she should be the princess under the Queen, supported Sydney in opposition; sharing the dread lest, by accepting the Federal Council, they might be undermining their own parliamentary prerogatives. For the supreme duty of military and naval defence, it must occur to the practical politicians in New Zealand and in Sydney, that Federation offers the best promise for Australasia, one of whose chief anxieties has been with regard to the descent of foreign men-of-war, in the event of England being involved with any Continental power. Should each Australasian colony possess a separate and costly navy, running the risk in war time of being eaten up piecemeal?—or, should a defensive fleet by concerted action be made to safeguard an organised Confederation of Colonial States? Should, by a different arrangement, the Imperial Power double the number of its warships in Australian waters, the cost being paid out of the colonial exchequers?

Such are a few of the general problems set by the principle of Federation. The gradual solution of these problems is awaited with confidence in the evolution of a scheme of union, which shall at once strengthen the empire and be freely and ungrudgingly accepted by all its component parts.

The practical application of the principle of Federation is complicated by variance of commercial views in the separate colonies. New South Wales has favoured the policy of free trade, and cannot easily run in leash with protectionist Victoria; yet confederated, one must concede to the other, not merely a practice but a principle. The protectionist confederations of the United States and Canada, and the Imperial Confederation of Germany, are not divided within their own borders, but promote the freest intercourse. No commercial state legislates wilfully against itself, but against other states. Confederations must therefore adopt a protectionist or free trade policy as a whole, and in reference solely to foreign intercourse.

Another complication arises from the degrees of prosperity of the different colonies, the struggling settlements having all to gain and nothing to lose by union, while the flourishing may gain, but only by taking upon themselves part of the burdens of their neighbours. Nor is this consideration unimportant. In Queensland, for example, the public expenditure reaches the enormous, and to Englishmen, the almost incredible amount of £7 a year for every inhabitant—about one-third of which, however, is derived from the sale of public lands. The whole area of the country belongs theoretically to the crown, practically to the colonists. The first object and duty of Australian statesmen is to encourage a sound and stationary population of settlers. A high price for land prohibits settlement; a low price throws enormous tracts into the hands of single owners, and if given away, settlers sell it at the best price obtainable and disappear. Administrative skill is therefore directed not to the profits on land sales, but to binding the purchasers or occupants to their holdings. Thus it is that a young colony like Queensland, with a property in land equal in size to nearly a third of Europe, and which it is bound to sell, realises less from its disposal than suffices for the expenditure of the colony, and the Queenslanders are called upon for more in the form of taxes, than the whole amount of the annual sales of the land.

Experience has been dearly bought by the Australian communities in the proper appropriation of the land. With the laws, liberties, constitutional institutions, and language,—the anomalies of landownership, of the mother country, were really improved upon by the early colonists. According to the authority of an ex-land minister of New South

Wales, "out of 40 millions of acres alienated in that colony alone, 14 millions were held as freehold property by fourteen individuals," while in the United Kingdom there is but one landlord who owns as much as a million acres. Subsequent settlers are consequently dependent upon these few possessors of the soil for the development of the industry and trade which can be founded only upon the pastoral, agricultural, and mineral resources of such vast regions. It is calculated also that the Colony of Victoria, which "absolutely refuses to receive either paupers or free imports of any kind," sends out of the colony yearly $2\frac{1}{4}$ millions sterling in rents to absentee English landlords. These obstructions to enterprise and progress have led the colonists to resort to artificial means, the policy of protection, to promote and encourage native industry, rather than to direct labour and skill to those vast resources which give Australia her immense advantages over Europe. Prominent and able men in all the colonies, knowing better the causes that retard growth and prosperity, advocate the stoppage of further alienation of state lands, and equitable recovery of lands that have become private property. Land Restoration Leagues, organised to promulgate the same doctrines, have met with steady and increasing success. To modify the institution of property in land is one of the intricate questions within the province of the Federal Council, and our dependencies seem in the way to anticipate the mother country in a solution of the pressing problem.

THE DOMINION OF CANADA.

The unchequered prosperity of British North America since its conversion into the Dominion of Canada, and owing to the homogeneity thus attained, acts as the most powerful incentive to the principle of colonial confederation. Within the first twenty years of the union the population increased 25 per cent., and now stands at nearly five millions of souls, and the Trade Returns expanded by 20 per cent., reaching at times a total of nearly 20 millions sterling with the mother country alone, or nearly half the external trade. Intercourse with home is curiously variable between imports and exports, this owing to the resources of the colony having been drawn upon in an extraordinary degree by British demands for lumber or timber, and forest products, provisions (bacon and pork), corn, and dairy produce; while imports, on the other hand, are discouraged by protective duties. The phenomena of the trade indicates that, in spite of the precautions of the Canadians to debar themselves from the cheap and excellent manufactures of Great Britain, in favour of the rougher and dearer goods of native make, necessity compels importations to a very considerable extent.

The statistics of emigration are equally favourable. Contrary to past experience, the increase in the numbers settling in the United States is not so marked as in the numbers going to Canada, the excess in the last instance having amounted yearly to more than double the excess in the first. The special attractiveness of the North-Western Territories, the facilities offered by the opening of the Great Pacific Railway, and the efforts made by the Dominion Government to have these splendid provinces settled, have combined to encourage emigration. The deviation of the current from the United States is the more important from its seeming significance of a permanent tendency.

The Great Pacific Railway, stretching for 3000 miles from ocean to ocean, and one of the grandest marvels of engineering in the world, is associated with the Dominion as the invaluable boon which cleared the path of confederation from its gravest difficulties. Both in opening up the resources of Canada as a boundless field of enterprise and as a new highway to the East, the railway is an achievement of genius, skill, and perseverance, the future effect of which upon the well-being of the British Empire, and, therefore, of the world, is impossible to over-estimate.

The timber trade, the chief source of the Dominion's wealth, fills many a mile of the backwoods with a strange wild life that finds no counterpart elsewhere. "All through the winter months," observes a recent graphic writer on the resources of Canada, "amid the deep drifted forest snows, we hear the sounding ring of the shanty-man's axe, the clank of the logging chain. The snort of the labouring horses and oxen echo and re-echo through the wooded solitudes while the short days last, and toiling figures flit here and there in the misty shadows of giant pines, the darkness of whose innermost branches has never yet been fathomed by the sunlight. A deadly war is waged all the while against the forest monarchs, who fall by scores with thundering crash beneath the sharp persuasion of the woodman's blade, until spring brings a truce to the slaughter. Then the myriad tiny creeks that reticulate the woods with a watery network burst their icy bonds. The melting snows swell the augmented streams to overflowing, and the huge square 'sticks,' trimmed smooth and white by the adze, rush down to the 'boom' that awaits them, where the tributary streams join the great river upon whose bosom their long voyage to the saw mills of Ottawa, or, through a Sargasso Sea of chips, to the trading ships of the St. Lawrence ports. Here the wobbling, unsteady mass of timber is speedily converted into 'cribs,' which, in their turn, are moved out into the main channel of the river, marshalled in order, secured side by side and end to end, and the completed fabric floats, a raft in its entirety, a ship whose sole cargo for many a hundred miles, is to be its own precious self. The weary foreman smokes his pipe with a satisfied air as he watches the approach of the steam-tug, a noisy, dirty, uncouth monster, to take the freight in charge for the first stage of a journey, certainly of weeks, maybe of months, from the heart of the timber district to the busy mart where the raftsman loses for ever his interest in the rude but precious craft that has been his sole care so many nights and days." As increased care is now being paid to forestry, colonial timber resources must become a regularly increasing source of wealth. Canadian commerce benefits by the diversion of trade from Russia; for, though the intelligence of the Dominion does not rise to the conception of the fact that the trade of a country flourishes most where it is allowed to expand without let or hindrance, and that its "totality," rather than its special component parts, is the true measure of national progress, neither does it fall to the demented economic ignorance of Russia, which, in face of a dying commerce, completes its ruin by new imposts heavier than have already nearly crushed out its puny life. Recent prohibitive duties on manufactured linens have lessened the inducements of our merchants to purchase the raw materials, flax and hemp, from Russian growers, just as previous imposts on British commodities had diverted our timber fleet to Canada. The detriment to Russia, self-sought, is severe, from the extensive character of our importations, and from the fact that the crop of flax and hemp, though inferior to the fibres grown in Netherlands and Ireland, is frequently of greater value than the entire yield of Russian grain.

The Colonial Exhibition of 1886 furnished ample proofs that Canada offers an inexhaustible field for the supply of flax and hemp. Wherever these fibres have been grown, especially in the North-West Provinces, there has been a prolific yield, with great length of fine fibre. Hemp thrives splendidly, attaining a height of twelve feet. Three profits are made from the plants, from the seed and seed oil, the fibre, and the refuse for paper-making. New scutching machines, rendering the crop quickly marketable, have given an impetus to the cultivation both in Ireland and America. The growing season in Canada, although short, is longer than in Russia, and finer in every way. If the still unbroken soil in the great Canadian wheat belt were for a single year sown in flax, the yield, it is computed, would equal that of Russia for eighty years to come.

In the development of her food resources, however, Canada has made the most marvellously rapid strides. Besides ever enlarging shipments of grain and of tinned comestibles, the principle of cold storage has been applied to cargoes of fresh fish, flesh, and fowl, as well as fruits and vegetables in every variety, to an extent that has made an appreciable impression upon our food stores. The triumph of industrial energy and skill has been reached in the application of scientific principles to dairy produce, a course which has actually created a branch of commercial enterprise of such magnificent dimensions as to revolutionise in the space of a few years the dairy industry of the United Kingdom, and reverse the relative position of imports and exports between the two divisions of the Empire. By the introduction of the Factory System, the production of butter and cheese has been so improved in quality and increased in quantity, that our premier colony, which in 1870 imported both commodities from England, now distances all foreign competitors in supplying our markets, and has stimulated English producers to better and more economical processes in their own dairy industry. The advances of Canada were notably displayed at the Colonial Exhibition in 1886. The influence of this Exhibition, and of other exhibitions previously held, on the sum total of the world's commerce, are greater than supposed by untechnical visitors, who pass through avenues of beautiful and attractive objects, and representative collections on so vast a scale, and can only be estimated at their full value by those who are acquainted with the details of each separate industry. One result of the Fisheries Exhibition was to transfer much of the manufacture of rods and other fishing apparatus from London to Redditch, and to extend the sale of British made fish-hooks on the Continent; a small, but typical illustration of results which quite escape popular cognisance. Similarly, our fellow-citizens in Canada have shown our machine-makers models of light and useful implements of husbandry, from which we learn lessons of great value for our home and still more for our foreign trade. English manufacturers and merchants are less ready than the Germans and Americans, to accept foreign types of tools and apparatus, and to modify their designs to suit the tastes and demands of customers in lands beyond their own. Exhibitions bring this lesson close to our doors, and, as a consequence, we have a greater variety of agricultural labour-saving machinery. As to Canada, India, Australia, New Zealand, the Cape, and the West Indies, direct and immediate advantage came from the knowledge diffused through the best and freest market of the world concerning their varied products. As examples, the tea, coffee, and tobacco trades of India and Ceylon were notably encouraged; and, among a large class of raw materials, samples from Australia and New Zealand of the finest woods, which have as yet never been superabundant, attracted a large amount of admiration and enquiry.

BRITISH WEST INDIES.

The commercial annals of our West Indian Possessions are an uneventful record during the closing quarter of the nineteenth century, brightened only with the hope rather than the certainty of the next century opening with fairer gleams of prosperity. These beautiful islands, once the choicest colonial gems in the British crown, shone with an artificial lustre during the period of slavery and high protective duties, and have never recovered from the utter collapse which befell their industrial and commercial enterprise upon the removal of their feigned and pretentious supports. Even to nearly the middle of the present century they absorbed about a fifth part of the total British exports to the colonies, since which date their relative decline, although their absolute imports have almost doubled, is such as to leave them with the ratio of about a fortieth of our total colonial and Indian trade. Education is making progress in the islands under British rule, and machinery has been introduced with beneficial effect into industrial occupations. A gradual amelioration of the condition of the colonies gives promise eventually of their olden prosperity being restored, on a firmer and more lasting basis, because in accordance with economic and therefore natural laws.

Ideas of Confederation of the Islands have been entertained, and the principle has been much discussed. Consolidated government would, doubtlessly, benefit the commerce, and, with it, the general well-being of the colonies. Special difficulties beset its realisation, which the Dominion of Canada did not have to encounter, and there is no Great Pacific Railway to remove the difficulties. The opening of the Panama Ship Canal must, however, play a similar part and vitally influence the future prosperity of the Islands. The main obstacles to Confederation arise from the financial condition of the colonies, and differences in the mode of government, some possessing local elective legislatures and others being crown colonies. Instances also occur of the colonists having prayed to be relieved of the right of self-government, by the crown resuming its former direct authority and responsibility. With regard to the financial question a few of the colonies are fairly flourishing and making substantial progress, while their neighbours are verging on insolvency. These last are readier to merge their interests and share in the advantages of a united legislature than their wealthier fellow-colonists are to meet them. Difficulties tend to be surmounted, and the future of our West Indian Dependencies are bright with promise of prosperity far exceeding the empirical and fallacious success of their pseudo-palmy days.

BRITISH POSSESSIONS IN AFRICA.

The British Colonies in Africa comprise, strictly speaking, Cape Colony, Natal, formerly a Cape Dependency, but now independent, the West Coast Settlements, and the Island of Mauritius. Besides these colonies proper, England exercises a temporary authority over Egypt, and still more recently has assumed the Protectorate of Zululand, meanwhile recognising a Boer Republic over the remaining portion of the country of the Zulus.

The history of British domination in Africa presents striking and remarkable contrasts, political more even than commercial, in the current closing quarter of the century and the quarters preceding. The Suez Canal, constructed by the French in face of the tacit opposition of this country, is the sole cause of our present powerful influence over the fortunes of Egypt, an influence which must continue to be exercised for years to come, since it is vital to the welfare of the empire to keep open the highway to India. Our trading transactions with Egypt are very large, fluctuating between 9 and 14 millions sterling in value, but the data have little trustworthy significance, inasmuch as both imports and exports consist largely of goods in transit.

Cape Colony, pre-eminently the most important of our African Possessions, by recent annexations of neighbouring territories, spreads over an area of considerably more than 250.000 square miles, stretching on the north-east to the confines of Natal. The population also of the colony has expanded from rather more than half a million to over a million and a quarter of various races. The commercial contrast between the two periods is equally significant, the general Trade Returns having risen from a gross total of 4 to 5 millions to an amount over 13 millions sterling, but this has declined during the last three years. At the same time valuable finds of gold and diamonds have enriched the colony since 1876, to the extent of several millions yearly, and the produce is steadily increasing in value.

These grand results are attained while protective duties limit the import trade, and yet which exceed the value of the exports by several millions. Customs dues on imports and railways amount to more than a million sterling, a sum equivalent to two-thirds of the revenue. To sacrifice such a serious source of income appears now too perilous, though if this amount were set free and the costs of government met by direct payments, it would fructify rapidly in a liberated trade, and the colonists would enjoy a growing abundance of manufactured commodities which they need and from which they are at present self-debarred.

Some of the items of export have made surprising advances. Wool, which stood at 23 millions of pounds in the previous period (1860), advanced beyond 47 millions of pounds, but has since declined somewhat. Still more astonishing are the strides taken in the export of Angora hair and ostrich feathers, which in 1860 were respectively 385 and 2287 pounds avoirdupois, and now stand at 4½ millions in the first case, and over 230,000 pounds in the second. The increased quantity of ostrich plumes has been aided by the development of the system of ostrich farming, whereby finer feathers are procured from the facilities of plucking them when at their best.

Cape Colony is a quasi-Confederation of States, with centralised parliamentary and responsible government, without local or provincial legislatures, the various Territories being merged in the parent colony of the Cape, and not possessing state rights of self-rule. The overwhelming preponderance of Cape Colony in area, population, wealth, and influence interposes grave obstacles to a South African Confederation of independent states, none of which could combine with Cape Colony on anything like equal terms. Natal, for its own supposed advantage, separated from the Cape Government and assumed independence, and its settlers are not eager to renounce their own act and deed; while the geographical conditions of the West Coast Settlements, Sierra Leone and the River Gambia, together with the Gold Coast Colony, are such, both politically and physically, that no community of interests can be said to exist between them and the great colonies in the south and south-east of the "magnificent distances" of this vast continent. Commercially, the West Coast and Gold Coast Settlements close the century with uneventful records. Politically, the period will be marked by German annexation of the Nama and Dama lands, between the Gold Coast Colony and Orange River, and comprising territories of 200,000 square miles. The chiefs of these regions were, by an honourable understanding, under the protection of the British Government; and German annexation was sprung upon the contracting parties with the curiously dubious plea that the treaty between the chiefs and the Queen, though cheerfully signed, had not been formally ratified. "There is not, however, a single square mile upon which the Germans can settle as colonists, and trade is far too insignificant to cover the cost of the simplest system of administration and supervision."

Having particularised and dwelt upon the obstacles to local confederations in the various groups of British colonies and dependencies, we arrive at several important conclusions.

1. A supreme Federate Council or Parliament is rendered more readily possible where the component states are contiguous and are already possessed of constitutional self-government, having points in common and a general community of interests. The United States furnishes an example of such a federation on a republican basis, and the Canadian Dominion an equally successful example of another on the basis of monarchy.

2. The first step towards the application of the Federative principle in any group of colonies, must be to bring the component states into accord by the grant of rights of self-rule, with local constitutional legislatures formed on a common model.

3. Groups of colonies geographically suggestive of Federative government, are, in the order of compactness, those of the West Indies, of Australasia, and of South Africa; but, politically, Australasia stands first, both in its experience of local representative government, and in the possession of an "Enabling Act," which provides for a representative Federal Council, by the general agreement of the colonies interested in the measure.

4. India and our other Asiatic dependencies, being governed direct by the Crown, are not prepared for Federation, inasmuch as races inexperienced in elective representative government, are, and must be, unfitted for the higher and wider trust of choosing representatives for a supreme Federal Council.

The idea of Federation is so rational, and commends itself with such force to statesmen and thoughtful politicians, that they await the evolution of philosophical and practical schemes to surmount every impediment and achieve the patriotic object which the empire has at heart. If, however, the attainment of separate Colonial Federations bristles with so many embarrassments and perplexities, how must difficulties be multiplied in an Imperial Federation or Federation of Federations, through a Grand Council of the Empire, to which the local Federations are the mere preliminaries? Yet events work towards this magnificent consummation of the destiny of the English-speaking race. Far before the patriotic pride of being citizens of Rome rather than of a village, of a great rather than a small state, political and commercial, benefits have followed partial union, with an emphatic assurance to carry conviction, that manifold and untold further advantages await the universal application of the principle. No legal bonds, as with ancient Phœnicia and Carthage, condemn our colonies to the rank of mere trading stations to aggrandise the parent state. Our colonists are free to trade, and do trade wherever they please. Our only commercial claim upon them is to open to them the best and most profitable market in the world, even while they do not reciprocate the advantage. Nothing prevents colonial merchants from buying in cheaper markets, except the non-existence of such markets, and, as a consequence, the colonists are our best customers. Ties of kinship and of language, knitted firmly by just government and freedom are, notwithstanding, immeasurably in our favour, inspiring a fervid loyalty to home, and facilitating commercial intercourse to a degree, which, other things being equal, always inclines the colonists to trade in British in preference to foreign ports.

Thrown upon their own resources, the colonies have prospered mightily, and find their interests bound up in the maintenance of a bond that insures powerful protection, while leaving them unfettered in working out their efforts and aspirations. Every year they more fully fill the field of view of British politics. Most significant are the figures, when, putting aside India and the British military and trading stations scattered over the globe, we find in the self-governed colonies and West India Islands a population approaching to twelve million souls, mostly of English speech and descent, which is in occupation of a territory between seven and eight millions of square miles in area, and which, apart from internal traffic, conducts an outer trade valued at some two hundred millions per annum, considerably more than half being with the United Kingdom. Even with restricted imports, the balance is in favour of England over all other countries combined, and the advantage is still more pronounced in favour of the export trade.

Where the aspiration for Imperial unity grows in intensity and is leavening every region under the dominion of the Queen, a scheme of supreme Federation, vast though it may be to realise, cannot be regarded as insuperable, though as yet beyond the scope of constructive statesmanship. Obstacles present themselves both of temporary and permanent character. The conditions of the problem cannot as yet, and perhaps for many years, be formulated for practical solution.

The organisation of an Imperial Federal Council must be built upon the basis of representation of the colonies in the Imperial Parliament, or upon that of a newly-created and independent Executive and Legislative Institution, of which the United Kingdom would be the leading constituent. The fatal defect and danger of dual government is in the inevitable and irremovable risk of conflict between two co-ordinate authorities from friction of working, where interests and functions, so completely interfused, cannot be separately administered.

Colonial representation in the Imperial Parliament does not seem easier of accomplishment. A recent writer on this subject remarks:—

"It is impossible that Canada, South Africa, and Australasia shall long be content to have their affairs imperfectly understood by their British rulers. They cling to their connection with the mother country, and are no less loyal than their brethren at home. Could they make their voices heard in the House of Commons it would be a national gain."

Between cordial sympathy with these sentiments of attachment, and active co-operation, there is a long step. Englishmen believe in colonial loyalty and desire closer union, yet fail to see how colonial representation could affect the subject of colonial defence. Colonial representatives in the British Parliament would form at best a small minority, a Fifth Party, which, if outvoted after protests in favour of peace, would strain the situation more than if the colonial party had not been heard. Besides, are the colonies, if represented, prepared to pay their share of the expenses of a war? "Taxation without representation is tyranny," according to the doctrine of Burke. What then is representation without taxation? English taxpayers might one day be plunged into a contest by a balance of bellicose colonial votes, and have to pay the piper while the colonists called the time. No proposition since the independence of the United States has been put forward by the colonists to accept taxation, and the remembrance of our own disastrous experiment holds us in check of the resentment which the suggestion from us would arouse.

The apportionment of representatives to a Grand Federal Council would check perplexities which could be resolved by compromise and adaptation, but uniformity of principle could not be followed. India must remain a separate empire, from its constitution under the Empress-Queen; and from the absence of representative institutions, only through official functionaries, &c., for a very long while, in any case, could its voice be heard. By so much, we should still continue a decentralised empire, while the aim of Federation is to weld the parts in legislative union.

The gravest difficulties of all must arise in defining and limiting the executive and legislative function of the Council. There is so great a diversity of interests in colonies spreading from the Tropics to the Poles, that were we to base these functions on the irreducible minimum of a common bond or community of interests between all the colonies, no advantage would accrue beyond what they already enjoy. To constitute the Council on the model of the Dominion of Canada, would leave Canada as it is; but, while it would advance the rest of the colonies politically, it would give them no more than they could obtain by Local Federation. The multiplicity and diversity of the British colonies dispersed over the globe, give in some respects a superiority to Colonial Office administration under a Secretary of State. Representations from separate colonies receive consideration on their merits, unfettered by and irrespective of relationship to other colonies, with whose existence they may have only a geographical acquaintance. The decision between union and isolation, apart from the powerful family sentiment in favour of the first, has to be arrived at by weighing the advantages against the disadvantages of either course, and being swayed by the balance.

Enlarged Federal powers seem a necessity, but court, then, opposition and resistance in an assembly of so many diverse views, even if not incurring the further danger of trenching on the prerogatives of the crown. If commercial authority be conferred, it must aim at uniformity of commercial law, bring the controversy between the counter principles of restricted and unrestricted trade within the arena of debate ; and England, as an integral factor of the Council, might find herself bound by a preponderating colonial vote to reverse her whole policy of Free Trade. The part which the mother country would play in the Council would demand the most anxious and lengthened consideration. The Crown would be hampered in the royal prerogative to negotiate treaties of commerce which should conform to the opposed home and colonial views. Fiscal authority conferred upon the Council would involve the gravest question of taxing the colonies, a course to which, so long and deep-rooted has been the objection, that it would require a strong effort to accept even through their own representatives. Fiscal legislation, external to the colonies, would apply mainly to commerce and purposes of Imperial defence. For the state to relegate the control of the Imperial defences in any degree to a Federal Council would be to abnegate a primary duty ever identified with the functions of the supreme government. We have, on the other hand, adverted to the risks attendant upon this control in a Parliament enlarged by the presence of colonial representatives. Through this labyrinth of embarrassments the intelligence of our thoughtful and patriotic statesmen is trusted in to evolve a system of British Federation, compared with which the widest area of Imperial Rome was hardly more than a province, and from which difficulties and dangers shall be eliminated, while every advantage of union shall be insured.

PART III.

COMMERCIAL POLICY OF THE SECOND HALF OF THE NINETEENTH CENTURY.

In a manual of commerce it is out of place to advocate controversial principles. The facts of industrial and commercial history should be marshalled in unbiassed array, and students of the subject left to draw their own inferences. Contrasting ancient and mediæval trade systems with those of modern and recent days, the salient features are, entire absence of economic science in the past, and the authority of this science in our own times. The laws of political economy are not an invention, but a discovery; for they are the laws of nature. Ignorance of these laws inevitably led to grave errors, for they operated unseen, and to the detriment rather than to the advantage of races. Only by instinctive obedience to these unknown laws was wellbeing anciently attained. Inherited tradition still hampers the recognition of them, though now formulated into a system. The debasement of a thousand years of serfdom cannot be removed by any emancipation act; nor can the interwoven complexities of social life of a still longer period be repealed by a vote. Free trade is a development of political economy. It existed with the Phœnicians, Greeks, and

Romans, in a certain sense as a necessity. These powers, in turn, possessed the commerce of the world. Commercial supremacy fell later into the hands of the Arabs, the Italian Republics, the Hanseatic and other leagues. Free trade in all these instances meant " free amongst themselves ; " for they were the active traders, while the races with whom they bartered were passive. Phœnician colonists were partly ruled from home. Roman domination made Roman citizens of conquered states.

Roman statesmanship never rose to the idea of protection to native industry for the sake of fostering production ; an idea, which, whether erroneous or correct, is at least humane. Imposts were solely for purposes of revenue, corruptly and profusely spent. Industry was fettered, and its vitality thereby diminished. Every evil of protection was encouraged, with none of its countervailing advantages, real or supposed. Roman domination was a system of might against right. In order to minister to the profligacy of voluptuaries, and to fill the state coffers, the consuls extorted from industry its all ; until the founts and sources of wealth dried up, and rulers and ruled were alike impoverished. Roman policy, essentially selfish, left its impress upon succeeding ages, though without the same debasement and with some redeeming features.

The Italian Republics and the Hanse League, type of the rest, were inspired with the idea of aggrandisement, and rigorous in the suppression of infringements of their self-constituted rights ; but their wealth and magnificence came through trade, and not from the extortions of conquest. Their decline also was not the consequence of inward decay, but of the evolution of a commercial spirit among better situated states.

Again, we observe in the invasions of Cortez and Pizarro the spirit of rapine, shedding a meteoric glare baleful to

Spain and Portugal, and reflected in some degree upon the Dutch and English, in their earliest efforts for commercial supremacy. The booty from piracy and aggression cannot continue; devastation destroys the roots of industry. More genuine agencies were slowly building upon ruins the true commercial greatness of Holland and England. Ignorant rivalry, from the selfish belief that the prosperity of one state means the depression of another, long prevailed between them, leading to frequent offence and reprisals, until England's claim to the throne of the world's commerce was firmly maintained.

With the whole earth one vast trading-ground, commercial ideas began to expand. To encourage distant races to produce brought more profit than to take their all by force; and thus better economic principles prevailed. Industrial and commercial terms in time received precise meanings. *Demand* inferred more than need; it was understood to be the desire for a commodity with an equivalent *value* to give in return. To this conception of value, or this quantity of a commodity offered in exchange, the term *supply* was applied. Out of the distinct and definite signification of demand, supply, and value arose the idea of *reciprocity.* Prosperous and wealthy states were not necessarily rivals, each benefiting by the other's reverses, but rather by each other's advancement. The more they possessed, the more they had to give in exchange, outbidding poorer states; and the more mutually helpful they would be. They were each other's best customers, and both enriched by enriching each other. Commercial intercourse, in this light, between states, was only the dealings, amplified, between single individuals. Just as individuals were free to "chop and change," without let or hindrance, to their mutual advantage, so, it was argued by a school of economists, should nations possess the right of unrestricted commercial intercourse. Thus the problem of protected industries, as contrasted with universal free trade, was presented to the public mind ; and it still awaits solution. This problem comes before every enlightened student of industry and commerce, every producer, distributor, and consumer of wealth, and is one upon which he is bound to make up his mind. The principles of either doctrine are easy to arrive at, but to apply these principles to the manifold complexities of the world of labour and interchange is a task, even if possible, of vast magnitude. Advocates of free trade lay down the doctrine of production without hindrance. Any interference with distribution—that is, with interchange—whether between individuals or nations, by so much hampers production and prevents the increase of wealth. On the other hand, we must take the world as we find it. Changes of principle, even for the better, can only be brought about by converting public convictions to different views. Restrictions have existed ever since the ancient days of industrial castes in Egypt, and exist now throughout the world. England is the solitary state which has adopted a free-trade policy in its entirety ; and even England places customs' dues upon some imports and excise dues upon some home products, which, although solely for revenue and not for protection, are interferences and hindrances. The only line that can be drawn between imposts for revenue and for protection is absolute noninterference. In the case of fermented beverages, both customs and excise are charged, on moral grounds, at the highest rate consistently with discouragement to illicit manufacture. Statesmen say that revenue must be had. In the present state of public opinion, it would not be possible to provide ways and means exclusively by direct taxation, without a revolution. It would open the door to wide fraud. Many citizens would escape the burden, while many who pay more, unconsciously, in taxes on the commodities they consume, would clamour at its incidence. Whatever may be in store for indirect taxation, the practice is a present necessity.

The theory of protected industries is humane. Its object is to foster, not to hamper production. The wealth of a state consists of the aggregate wealth of the citizens. If then, by protecting industry, we can enrich the producers, the stock of national wealth is to the same extent increased. To be just and logical as well as generous, however, under a benign protective system, we must minutely inquire into the conditions of every industrial handicraft, and so adjust their differences, that no one vocation should be unduly over or underweighted. Were such a procedure possible, it would, like old Austrian paper money, compare only with the elaborately small classification of entomology, except that insect structure is permanent, and the relations of the different industries are ever varying, and require daily readjustments. But it is evidently impossible, and glaring anomalies would give rise to discontent. Thus the system of protection has always applied to selected industries more or less numerous.

Let us suppose the equipoise so perfect that producers uniformly gained ten, fifty, or a hundred per cent. more profit on their commodities. Then, as producers are also consumers, they would have to pay in the same ratio for every commodity they bought. Where then the benefit? Assuming again only a favoured few protected, it follows that they would sell to advantage over their fellows, and also buy to their own advantage of the less favoured producers, except, in so far as their enhanced charges arrested demand for their wares.

Protection and free trade are not so much the statesman's as the people's question. Statesmen can but deal gently with the traditions of ages, which have become interwoven with our habits and modes of thought. Advocates of either principle have a fair field to educate public opinion to their views, until, by an overwhelming majority they determine the national decision. Governments have ever interfered with productive industry, by sumptuary laws, regulating the fabrics we wear, the quality, material, value, seats of manufacture, the number of hands to be employed, the wages to be earned, and the classes privileged to use the finished products—all in the supposed interests of the commonwealth. Governments have interfered by imposts which have crippled production and barred improvement or progress, and by monopolies which have taken divisions of labour from those best fitted to excel for the benefit of the least fitted, whose aptitude has been simply official—all in the interests of a fiscal system, or of favoured individuals. Governments have interfered with the land, its ownership and cultivation, the nature of the crops, the size and price of the loaf of bread—all in the interests of feudal customs and the supposed advancement of agriculture. Every division of labour is willing to be fed by bounties at the public cost, and to be fenced in by special laws to keep outsiders from its preserves, but is less anxious that other divisions of labour should be equally privileged—in accordance with the economic principle of selling in the dearest market and buying in the cheapest. There are industries which may be described as indigenous to a country, as those of coal and iron in Great Britain, and that of wine in France; others are less adapted to the local conditions; as, say, that of tobacco growth in England, and again others like those of the cultivation of cotton and of tea, which would be altogether unproductive pursuits. In order to ensure an equality of profit and thus induce capitalists to invest, indifferently, in either one or other of these classified lines of production, every industry must be protected and bounty-fed, in the ratio in which it approximated to each successive class. Let us notice that the profits of the capitalists, thus bolstered up, are not the results of their productive labour and skill, but an extraneous grant in aid, contributed by the conjoint industries of the country. Given the raw material, the appliances, and the same productive skill, the produce would remain as before, but the profits would diminish or disappear. In other words, labour has been removed from paths where it might produce much, and transferred to paths where it can only produce less, encouraged thereto by the unconscious cooperation of other outer industries, seeking for themselves the same specious benefits. Roughly speaking, this system has been pursued for ages by industrial communities upon whose heritage we have entered. As a consequence, class interests have become so interwoven in the body politic, that the attempt to disentangle them shakes the whole social fabric, and the inertia of habit confronts, with stolid resistance, the arguments of the economist and the will of the statesman.

By the introduction of machinery in place of hand-labour individuals suffered from their inability to adapt themselves to the new conditions, and they resisted the innovations; but the advantage to the community has been inestimable. Labour-saving machines came in by degrees, and resistance was overcome in detail. Had it been possible to introduce, all at once, and in its entirety, the machinery which gives to these small islands, the productive force of the hand-labour of the whole human race, the sufferings and the resistance of individuals would have been so widened, that instead of a blessing a cataclysm would have befallen.

The substitution of the principle of production without hindrance and of its corollary, unrestricted competition, would cripple so many interests which had been nurtured in dependence upon the government, and annihilate so many others which lived, moved, and had their being in such dependence, that the consequences are feared with alarm as a public calamity rather than an advantage, and no country has had the courage or the temerity to copy England in the adoption of Free-trade—not even the self-governed colonies of Great Britain beyond the seas.

Free-trade principles were not adopted in England without years of strenuous conflict between different schools of economists, and only then with caution. The first to be relieved of duties were the *necessaries* of life, of which corn is the representative. Then followed the raw materials of manufacture which fed the great industries of the country. By degrees, a multitude of minor imposts were removed from the statutes, and, in the end, every shred of fiscal restriction was swept away, except upon some half-dozen commodities which could not be classed as essentials of well-being, such as tobacco and spirits, and which are heavily weighted with imposts, both for purposes of revenue and morality.

Throughout the second moiety of the nineteenth century, British industry and commerce have been conducted on the principles of unrestricted competition. Public opinion is, notwithstanding, still divided upon the merits of these principles and upon the part which they play in advancing or retarding the national well-being. British ports are freely open to the world. Commercial freights are free to come and free to go, without reciprocal advantages for British vessels in ports abroad. At the best, "favoured nation clauses," in treaties of commerce with foreign states, have been inserted, by which Great Britain is put on the same footing with other commercial powers.

In a retrospective survey of the half century of Free-trade, or of the almost coincident reign of Queen Victoria, the features which stand in highest relief are the unprecedented advances, "by leaps and bounds," of the national wealth, the rapid growth in numbers and in the means of sustentation of the population, the continuous increase of the national revenue, and the general development of the empire. No empire, in ancient or modern ages, save, perhaps, one, has experienced so glorious an evolution. The coincidence of the facts with the prevalence of Free-trade, if it does not establish as a fact, justifies as a surmise, that the phenomena are related by the law of causation. Yet it would be a hasty, rash, and ill-advised conclusion; for the United States, with a stringent protective system, and, in a measure, prohibitory tariff, have advanced by even greater strides. Either the Republic of the United States is so wonderfully placed that it has advanced in spite of economic error, or England's prosperity is due to other causes than Free-trade. It follows, likewise, either that the progress of America would have been indefinitely greater under a system of Free-trade, or that England's greatness would have been magnified by Protection.

Not to Free-trade, say the upholders of Protection to industry, do we owe our progress, but to new-found capital—to an enormous influx of gold from California and Australia—to the evolution of science, which has enriched us with material resources beyond our dreams; to inventive, mechanical, and constructive genius, which has reconstituted our means of production, and furnished us, in our railways, telegraphs, and swift-sailing steamers, with facilities of commercial intercourse, such as the world has never seen.

Not to Protection, say the Free-traders, does the United States Republic owe its advancement, but to its rich material resources; its unbounded expanse of territory, capable of absorbing the productive labour of both worlds;

the impulse to the invention of labour-saving tools over areas too large for sparsely peopled communities to cultivate; and perfect freedom from aggressive attack.

Again, in reply to the Protectionist, it is not improved means of communication which create trade, but improved trade that necessitates better facilities for traffic. A farmer does not pull down his barns and build greater in order to increase his crops, but increased crops, however produced, necessitate larger barns. It was the desire to get larger quantities of coal to port, the coal being ready, that inspired the thought of tramways, and stimulated the genius of Stephenson to the construction of a locomotive. The urgency of rapid, safe, and easy transit for commodities awaiting carriage from abroad, gave the impulse to engineering skill to adapt steam and iron to our mercantile marine, marvellously abridging labour, time, and cost, and necessitating new docks and warehouses for our multiplied stores. Otherwise, foreign produce must have lain dormant or perished; for accumulation, without means of ready transfer, would be profitless labour. Production precedes conveyance. Given unimpeded production and the rest follows in due sequence. Trade languished under the Roman Empire, being overburdened with fiscal imposts, though the Roman roads remain, unexcelled, in our own day. Famine, in former times, prevailed in one province of France, while corn rotted in another, owing to fiscal barriers placed between the political divisions of even one kingdom. Harvests in parts of Russia, on the other hand, perish from the badness, fewness, or absence of roads to market and port. In the Saxon age, productive industry, in our sense of the term, could not be said to exist. Each family was as "self-contained" as a house standing in its own grounds, or as the nomads of the desert. As there was no division of labour, there was no interchange properly so called;

neither did there exist means of communication worthy of the name.

So far from the facilities of transit being the primary cause of production and incentive to industry, it is historical that, until the advent of railways, the art of road construction was far in the background and totally inadequate to meet the development of productive enterprise. The only road engineers of modern eminence are confined to the three, within the nineteenth century, Metcalfe, Telford, and Macadam; a crucial proof that the marked expansion of productive labour had not been due, primarily, to readier means of intercourse. Since railways have nearly monopolised the inland transit of goods, the system which scores our country with a plexus of channels of interchange, has developed from existing traffic, not from speculative or future traffic. Branches spread to points where traffic was ready and waiting, not where it had to be created.

As a secondary agent of production, the means of communication, nevertheless, play a very important part. Productive energy is stimulated and encouraged by the certainty that produce markets are easy of reach, competing for merchandise, and giving immediate returns to industrial enterprise. Labour is thereby stimulated, science is evoked to discover new raw materials, modes, and applications, and inventive genius is quickened to devise machinery to multiply the effects of manual skill. All tends to increased production, which, in turn, presses upon the means of conveyance, to meet, by extensions continually in progress, demands continually made.

Expeditious correspondence is co-related to the rapid transit of commodities to and fro. The perfection of our postal service, the outgrowth of trade, is exceeded by the marvel of the telegraph, which puts a girdle round the world in forty minutes, and places us in contact with the uttermost parts of the earth. There are completed within an hour transactions which once took weeks, months, or years, with the risks of intervening seasonal changes and market fluctuations to defeat the expected results. The surmise or possibility of scarceness in any one quarter sends a vibration through the electric wire and freights hasten from every zone to avert evil, with the blessings of abundance. Commercial enterprise is thereby deprived of the happy chance of making fortunes, as aforetime, at a stroke, but, as an equivalent, it is relieved from the risk of losses equally great. Fluctuations of values are within calculable range, and profits tend to an equable level. Colossal fortunes are not often realised, but abundant wealth is more generally diffused.

All our inferences and conclusions relating to the policy of Free-trade, must, perforce, be drawn from collation of the facts of British commerce. Corn stands preeminently the representative of commercial products. As the prime necessary of life, corn stood in the forefront of the economists through years of conflict between the opposed policies of Protection and Free-trade, and was the first, as it was the greatest, of the commodities to experience the effect of the reversal of our practice. A sliding scale of duties on foreign corn lasted from 1828 to 1846, when the corn laws were virtually repealed. This scale varied according to the market value of English wheat, from 20s. a quarter, when the market price was 51s., to 1s. a quarter when wheat had risen to 73s. A class conviction influenced a legislature of landowners, that their interests were paramount in the country, inasmuch as agriculture was the basis of the national stability and well-being. The farmers, therefore, who produced "the staff of life" for the good of all, must be guarded against discouraging loss, for loss to them meant loss to the community, as well as to the landowners whose revenues from the rents would be impaired. Farmers, consequently, had a *natural right* to remunerative profits for their corn, which must be secured to them by keeping foreign supplies from competition. The *natural value* of corn was taken at 51s. and upwards a quarter. While the English made 51s. at market, the foreign importer only made 31s., having a pound duty to pay out of the market price. Corn, therefore, could never be cheaper than 51s., for the duty cut off every chance of profit on foreign corn, and prohibited imports. The sliding scale even claimed to be humane, for as scarcity was indicated by higher market values, the import duty fell by degrees, until, at the highest point, it paid the merchants to import, and the scarcity was in a measure lessened.

The specious argument, apart from protection to husbandry in favour of a duty on corn, is first, that it is paid by the foreigner, and, second, that, as every one eats bread, no citizen can escape his equal contribution to this far-reaching tax. The rejoinder is that the importer is only the proximate payer of the duty. He makes no free gift to the buyer of corn. The consumer is the ultimate payer of the tax in the price charged for his bread. The very injustice of the tax is in the fact that all pay alike, rich and poor. The rich eat without stint, whether bread is cheap or dear, and pay no more than the poor, who are stinted when bread is dear, and must deny themselves even when cheap.

Since the repeal of the corn laws, bread-stuffs have poured into the ports in ever-increasing quantities. Who have eaten the thousand million extra quarters of wheat that have come into the country? Not the rich, for they had enough before. The growth of the population does not account for the consumption. One cannot resist the conclusion, that the poor have eaten the wheat; that the consumption has proved a real want to have been supplied; and that food had been held from the masses for a generation by the corn laws for the advantage of a class.

England, as the best market and the world's emporium for corn, has communicated an impetus to its cultivation in every clime favourable to its growth. England sends out its manufactures in exchange for corn, and there can be no question that the extensive commerce thus created has been of benefit both at home and abroad, and vastly added to the national wealth.

We are concerned, however, to know how home-husbandry has fared. Firstly, we observe that extreme fluctuations in the price of corn have entirely disappeared and become things of the past. Good and bad seasons have ceased to influence, in any marked degree, the value of grain; the failure of our own harvests being amply compensated by the abounding yield of foreign fields. An uninterrupted course of increasing produce has resulted, together with a uniform tendency to lower values, until, during the decade of years of severe trade depression, beginning with 1880, the minimum was reached—thought impossible, when the sliding scale regulated the trade.

Secondly, it admits of as little question that the cheapness of bread, leavened no longer "with a sense of injustice," went far to save the masses from much misery and society from their turbulence and discontent, and the repetition of the bread riots of other days, during the terrible years of the cotton famine, 1860 to 1866, and the longer period of depression from 1880.

Thirdly, agriculture, though suffering in sympathy with the depressed industries of the country, still retains, as a single industrial pursuit, its primary rank. The change of systems inflicted undoubted hardships upon individuals, but agriculture survived. A further result has been that landowners, no longer bolstered up by invidious privileges at the cost of the community, have had to submit to a general reduction of rents. Meanwhile, agriculture has become a science. Young and enterprising heirs to the traditions of husbandry, have been trained in the new conditions, and aided by the relief in rent, have brought their intelligence to bear with success, upon the problem of making two blades of grass grow where only one blade grew before. They have studied the nature and capabilities of crops and soils, applied scientific principles to cultivation, introduced labour-saving machinery into every process of their vocation, and have so diminished the costs of production, that under the present system of "high farming," the United Kingdom more than holds its own, and proudly claims to produce, over equal areas, far in excess of any other agricultural country. If, as authorities assert, the productive powers of British soil, are still but half developed, and the stimulus of unrestricted competition maintains us in the course of improvement, the day cannot be distant when the triumph of science shall be complete and "no man shall make us afraid."

Let us imagine that the worst consequences ensued from the substitution of Free-trade principles for those of Protection, and that agriculture had been actually ruined by the change. Must we admit the inevitable to have been wrong? The making of cider has been abandoned in some localities of America, and the apples are left to waste, because cider is a fermented and therefore a reprehensible drink. Must we blame the sentiment of abstinence for the ruin of a local industry? The repeal of the corn laws was the resultant of two combined causes; the imminence of insurrection and the overwhelming preponderance of the national sentiment. The true inference would be that agriculture had previously rested on a fallacious industrial basis; that an industry which could not hold its own was not suited to the country; and that from an empirical prosperity must be taken both the amount contributed to its support by surrounding industries, and the amount withdrawn from productive fields of labour to engage in less profitable pursuits. It may well be, as with the Continental beet-root sugar-culture, that protected interests, under the fostering care of government, have grown to such dimensions, that statesmen feel it better to bear the ills they have than fly to others they know not of.

The subject of corn really exhausts the case *pro et con* of commercial policy. The protean aspects of the question, presented by manifold commodities entering into the national industry and commerce, are really the multiplication of the features of the corn question. No intelligent thinker dreams of repeating a duty on corn.

We grant, say the Protectionists, that corn must continue free, for it is the prime necessary of life and the mainstay of the multitude. Be it observed, that it is not mere animal existence, but the *comfortable* existence, that comes from abundance and variety of food, and that freedom from care which leaves scope for the evolution of man's higher intellectual nature, which are the proper objects of statesmanship. The means of warmth, provided through the agencies of clothing, fuel, and shelter, are necessaries as vital as food.

If we trace the phenomena of industrial life through the four categories of food, clothing, fuel, and shelter, we traverse the whole range of productive labour. What holds good of one category, or of one commodity in that category, holds good of the other categories, and of the other commodities in each category. If, in the abstract, it is right to leave the production of corn perfectly free, it must be also right, first to leave every other food product equally free, and, then, to extend the same freedom of production to the other necessaries of life, in their multifold forms of clothing, fuel, and shelter, concisely summed up as the means of warmth. In fine, restraints upon production arise from unconscious ignorance, which confounds the phenomena and laws of causation, and from the fiscal necessities of rulers. Philosophical statesmen who see the consequences, find them too powerful to cope with; they can but shape their end to ameliorations. Thus Ireland complains of a ruinous fall in the market price of butter, owing to the immense quantities of American butterine or *bosch* entering duty free, although it took forty years for free trade to produce this effect. Science advises, and is ready with its gifts to justify its advice, that Ireland should cast about for means of improving the manufacture, economising the cost of production, and realising so high an excellence of quality, that this favoured dairy land should regain its pre-eminence in butter-making and challenge competition. Such a course would bless Ireland and benefit the community of consumers.

A minister of state suggests, on the contrary, the empirical and chimerical device, to stop the supplies of butterine. Because he does not like butterine no one shall eat it, not even those who cannot buy butter. Because Ireland does not excel in her own special industry, no producers shall compete with her. The device is as crude as it is perfunctory; empirical, as a specious treatment of what is seen, while the root of the evil lies deeper, unseen, and untouched; chimerical, inasmuch as it involves the reversal of imperial policy, accepted by the nation, for half a century, and which public opinion, in the main, is not prepared to forego.

Our Free-trade policy is arraigned upon an indictment of many counts. To make a fair presentment, we must investigate the charges and give a verdict according to the evidence.

By the removal of every commercial restriction we have stimulated the productive labour of the world at large, to the detriment and at the cost of native industry. By the freedom of our laws we have sacrificed native rights for the advantage of foreign states, whose citizens swarm in our midst, crowding our own labourers from the paths of production, and eating the bread which our own citizens ought to earn. By our irrational legislation, implying a love for our neighbour better than for ourselves, we have filled our country with cheap and worthless foreign wares, while our own industries have languished or died out, and our toilers earn a diminished wage or seek employment in vain. By our reckless course of generosity, to our own detriment, we have given advantages to foreign states, without demanding an equivalent; of which advantages they have been ready to avail themselves, but have shown no desire to reciprocate.

The apostles of Free-trade had such unquestionable faith in their doctrines, as to believe that it only needed the example of England, for every commercial state to accept eagerly the same principle. In the fervour of their convictions they left out of account the inertia of tradition, the tenacity of class interests, the unlikelihood of the gratitude and self-sacrifice of commercial nations abroad, for a boon in which, though conferred upon them, they had no voice, or a bargain, of which they had already the best. Our self-governed colonies have kept as stringently protectionist as any independent power. Free-trade advocates lost sight also of the possibility that the prosperity of British commerce, supposing the success of their principles to be ensured, might be attributed to totally different causes.

It cannot be gainsaid that foreign states have been quickened into industrial activity by the Free-trade policy of England. They have rushed to our markets and found the best and readiest sale in the world for their produce. They have taught our language in their schools, trained their young merchants and manufacturers to look to England as their field of industrial operations. They have established themselves in our midst, competed, at home, with our manufacturing pre-eminence, and with our commercial supremacy abroad. Instead of an equitable reciprocity, they have made it a national aim to effect the conquest of the industrial and commercial supremacy of the United Kingdom. So far from fair trade intercourse, they have protected their manufactures, they have brought in aid every government encouragement, every light of science, and have built technical schools expressly to produce industrial experts, in order to render themselves independent of England. The effects are seen in English "Trade Returns." Our imports from abroad much exceed our exports from home. While foreign countries are ready to send their produce to our markets, they decline and refrain from taking ours in exchange, preferring to produce for themselves. Many people think this unfair of the foreigners, and foolish of ourselves to give them such a chance. A body of "Fair Traders" denounce a "one-sided" free trade, and advocate a system of reciprocity which should limit our commercial intercourse to those countries ready and willing to meet us on equal terms. In other words, our free trade should be confined to ports where free trade is reciprocal, and duties should be levied upon the merchandise of protectionist states equivalent to the duties which these states impose upon ours.

Against this course it is advanced that partial Free-trade is not Free-trade at all. Standing alone as a free-trading nation, we should have to revert entirely to the policy which we had deliberately abandoned. In the present state of public opinion, the attempt at such a reversal would hurl

British ministries from power. A tax upon the people's food, by stopping the free entry of foreign corn, which is the head and front of our offending, would create insurrection.

The system of differential dues has been on its trial and found wanting. Philanthropic ignorance penalised slave-grown sugar from motives of humanity; but as the sugar betrayed no trace of its negro origin, it had only to be first sent to a free-labour port and thence trans-shipped to England to be entered as free-grown sugar. Impose differential duties on Continental wares, and the Protectionist states of Europe have but to make a free port, such as the former Hamburg, their depôt and intermediary agency, to make English fiscal restrictions null and void.

At first sight it seems strange how the dealings between two countries do not balance as between two individuals. A buyer and seller bargain on equal terms, each one gives and receives an equivalent value. How comes it then that our rivals in trade take from us so little and give us so much, a custom so opposite to that of the Dutch? Instead of unfair to us they seem unfair to themselves. Why then British umbrage?

Commercial dealings between states, as between individuals, *must* balance. The difference is redressed by the flow of specie to and fro. The cost of transmission of specie constitutes the "rate of exchange." We should therefore expect the rate of exchange to be normally against England and in favour of foreign states, and that an outflow of specie was draining and impoverishing our country.

As a fact, the rate of exchange is normally in favour of England, specie accumulates, and our country is the emporium of exchange as of commerce. Some other solution of the problem of the disparity between the imports and exports must be found. Almost without exception, every civilised state has been a borrowing state. Instead of debtor, the United Kingdom is the creditor of the world. By the perfection of our mercantile system, through the agency of bankers, brokers, and factors, foreign states are able to pay the interest on the loans they have received, in the form which is most convenient to them and the most satisfactory to us, that is, in produce instead of in money. Thus the surplus of our imports over exports is a measure of their indebtedness and of our superior financial position, a circumstance by no means to be lamented.

Again it is urged that, if we cannot convince other nations of their injustice towards us and the loss they inflict upon themselves, by the generous policy which we have pursued, entirely for our own advantage, neither shall we conciliate or convince them by a policy of retaliation. We are powerless to do the good we would ; and only powerful to do harm.

Further, we have to enquire whether the decadence of England is real or imaginary. Despite commercial crises and long periods of trade depression, the revenue returns swell every year; the savings banks fund shows a steady growth, and the wealth of the kingdom visibly increases. Though there have been no startling innovations in machine construction or motive power, an infinitude of improvements in details has brought our labour-saving machinery to a perfection of excellence, contrasting as greatly with our appliances before the Free-trade era as those appliances with hand labour. Applied science has not failed in its beneficent mission. Chemistry has given us the coal-tar products and metamorphosed the art of dyeing; revolutionised the produce of iron, and thereby transformed our mercantile marine from wooden sailing vessels to a steel fleet propelled by steam. Engineering triumphs, culminating in the ubiquitous telegraph, and those marvels of science to enhance the powers of the senses, are too numerous to recount. An amazing population has grown up, better fed, clothed, and housed, and, above all, better taught, than in any previous reign. Wages have risen universally, some ten, some fifty, some a hundred fold. Labour has been productive beyond all previous comparison, and the political discontent of the masses subdued by sympathetic legislation and abundance. Foreign trade, now and then, with temporarily slackened strides, has never ceased to advance, and it places us still in the pre-eminence of pre-eminence among commercial nations. These are not signs of decay.

As we found it easiest to simplify our investigations into the effects of unrestricted competition by taking a single commodity, corn, as the representative of our imports, so also in examining the industrial advances of other countries we will take a single state, Germany, as the representative of the rest, and trace its decried influence upon our prosperity. Germany stands first of the states which have disputed British right and title to a universal monopoly of the world's commerce. At the outset, it is, at the least, inconsequent for England, which has ever been aggressive in its commerce, to call Germany in question for emulating the course we ourselves have pursued. England's place in the van of nations has been reached by native effort and enterprise, and Germany's imitation is resented as an intrusion upon British preserves. Not less inconsequently, England opens her doors and invites all comers, and then, in alarm, looks upon their presence as an evil and questions their right to be here. Most inconsequently of all, we buy German manufactures which are said to undersell and undermine our native industries; we blame the Germans for selling and not ourselves for buying, and we call upon our government to "protect" us from our own acts and deeds in buying what we show we want by the dealings we voluntarily make.

How to meet German competition? An impersonal England is adjured by a cry of "England for the English" to purchase only the dear native goods, and, from patriotic motives, to discountenance buying cheaply abroad. A disposition exists, and is thought to be loyal, like the chauvinism of France and the spread-eagleism of the "States," to depreciate foreign wares as trumpery and worthless, though, while a ready market receives them, it proves that they supply a need. If, too, protection abroad is a valid reason for excluding foreign merchandise, it applies with the same force to our own flesh and blood in our protectionist colonies. Retaliation of this kind would only kindle the fire and lead to reprisals. The remedy would be worse than the disease, because it is empirical.

A distinction is, however, drawn between the importation of raw materials to feed our manufactures, and the finished products which supersede them. This distinction is somewhat craven. England has attained her foremost commercial position and held her own so long, from the rich resources with which she is endowed, the superiority of her productive skill, and the shrewdness and enterprise of her merchants. Are these forces failing, or incompatible with a policy of Free-trade? Other states cannot take from us our mineral treasures and fertile fields, even though they may modify our industry and trade. If, in the evolution of our race, our neighbours take a leaf out of our book, cultivate the resources at their command, and the industrial qualities which have done us such service in the past, it is more reasonable to rejoice at their advancing intelligence and wealth, than to write Ichabod over our own portals. Wealthy neighbours are peaceful neighbours, and are of mutual service, for, where abundance reigns, arising from the arts of industry, which are the arts of peace, political discontent subsides and social defects are remedied by constitutional means. The cultivation and practice of the industrial virtues are incompatible with the ravage, waste, and destruction of fire and sword, while they nurture a patriotic determination to safeguard the fruits and the rights of productive labour.

But, it is averred, England is handicapped to her disadvantage by the low wages which suffice foreign labourers. A German or Frenchman by his thrift will flourish on daily fare which an Englishman will spurn. Money wages are only indicative of real wages, that is of the comforts and necessaries for which the money wages are exchanged. It is undeniable that the average real wages of English labourers are considerably higher that the wages paid abroad. There is also the paradox in England that both the average rate of wages and the cost of raw materials have rapidly and greatly increased, while the cost of production has correspondingly decreased. We have, therefore, before us the remarkable contradiction that low wages in Germany enable manufacturers there to undersell us in our own markets, while high wages and diminished cost of production in England proceed together with equal pace.

We are constrained to ask, "Who decides the rate of wages?" Does German labour benevolently and universally unite, to deny native producers the comforts and necessaries of life in order to feed, clothe, and furnish the dwellings of our people with cheap goods? Such a sentiment is not yet the idiosyncrasy of any race of labourers. The highest rate of wages is striven for, even ignorantly "struck" for at times, everywhere. Neither the German nor the French labourer yields to the capitalist, as a free gift, any part of the wages fund; nor does the capitalist, in turn, forego this excess of his profits, in order to undermine

England. Labourers sell their industry and skill to the best advantage, and capitalists dispose of their produce in the best, that is, the dearest markets.

The phenomenon of increased cost of raw materials and a rapid rise of wage, going hand in hand with greater cheapness of production, admits of easy explanation. The introduction of a new machine or of a new scientific process, which multiplies previous production, say a hundredfold, creates a demand for raw material and raises its value, calls for more highly skilled labour to conduct the operations, at a higher scale of wage, and even then leaves ample margin of profit to reward the genius of the inventor and the administrative intelligence of the manufacturer. Here we see high wages play the part of factor in cheapening production. One is, consequently, curious to learn how low wages abroad performs the same industrial function.

In reference to corn, we were driven to the conclusion, that the extra hundreds of millions of quarters which have entered our ports since the repeal of the corn laws, have been mainly consumed by the poor; and, by so much, the labouring classes have received an addition to their real wages. But the abundance of other food substances, of cheap clothing, building materials, and domestic comforts, has kept pace with the abundance of corn. More emphatic than all besides, because the resultant of all, is the fact, on the testimony of Sir T. Spencer Wells, in his inaugural address before the Sanitary Institute (1886), and proved by unimpeachable "vital statistics," that the average age of the English people has increased during the last half century, from thirty to forty-nine years. How much this means! It means a general increase of health and wealth, and, necessarily, of comfort and happiness. It means the diminution of preventable disease and therefore of human suffering. It means that infancy has escaped or survived the ailments regarded as incidental to early years, that maturity has been more vigorous, and old age prolonged. These blessings and high wages are correlated. In the ratio of the abundance of the necessaries and comforts of life in a country so do the masses share; in other terms, so are their real wages, of which money wages is but the representative, high or low. High wages in England are due to the vastness of the national wealth, which admits of an enormous capital, a main constituent of which is the wages fund, being set aside for productive purposes. The exclusive cause of low wages abroad is that the wealth, and therefore the capital, does not exist, out of which higher wages must be paid. Foreign labourers fare badly compared with the English, because the food is not there to eat, the clothes to wear, nor the materials to hand for more comfortable dwellings. Wages are an index of the productive powers of a state. Measured by the standard of wages, the productive resources of the United Kingdom are advanced so far beyond those of the Continent, that, rather than alarm, our humanity should be evoked, and a helping hand stretched out to aid our neighbours along the path we ourselves have so successfully traversed. Inspired by the sight of England's progress and prosperity, foreigners have been quickened to emulate, if not excel, the industrial achievements of our country. They are passing through a period of experience which, with us, has become almost ancient history. Imitation is the sincerest flattery. We cannot, with a good grace, evince jealousy of such efforts and subvert our policy, in order to thwart others, who, at an indefinite distance, copy our practice and seek to share our triumphs.

If, yielding to the cuckoo cry of England for the English, we arrest our course and make for self-dependence and isolation in lieu of inter-dependence and commercial good-fellowship, where shall we begin? Shall we rest content with the untold blessings we at present owe to foreign sources, or be logical to the extreme, and extirpate every foreign production that has become rooted in our soil? We must strip the breakfast-table of bread from every zone, of butter from Brittany, Holland, and America, of eggs from France, of condensed milk from Switzerland, of potted luxuries from both hemispheres, of bacon from protectionist Canada, and dispense with the mahogany on which the tempting fare is spread. We must make the best display of dinner, bereft of foreign imported meats, of exotic poultry and game and Norwegian fish; season without condiments other than our native salt; we must get our joints from the dubiously native breed of the Chillingham ox, and aldermen must forget their turtle. Our esculents, from the humble potato upwards, must give way, as potherbs coming to us in foreign garb, for the familiar nettle of our hedges. Gallic, Iberian, and Rhenish wines must yield to the Saxon mead, for even old gooseberry is the product of an introduced fruit, and both barley and hops are imported for beer. Dessert must be furnished from the choicest wild crabs and brambles, solely in their season, as the only indigenous fruits. A concoction of the gay dandelion with native oil, must resume its rights as a salad, from which it has been deposed by the Italian olive and endive of France. The favoured Gorgonzola, Parmesan, and Gruyère, must yield to the native claims of Cheshire, while the great factories of the New World must find a market elsewhere for their cheese. The tea-table, no longer discredited with the celestial leaf, the fragrant berry of Mocha, and saccharine of the two Indies, shall resume the flagon of the good old times of England for the English, when life was the merry dance to the tabor and the Maypole flourished, *not* all the year round.

Discarding Silesian and merino wools, German and Italian flax, Chinese, Indian, and South European silks, and, above all, the un-English bales of New World cotton, we may revert to the ancestral russet and homespun, and still more consistently, to the close-fitting blue of the Britons. We should no longer depend upon the Dofrines and the Backwoods for our building pines, Further India for teak oak, or the Tropics for our marquetrie—the very name is foreign—and inlaying woods; but, discarding outlandish marbles, would build our palaces of native brick-earth, with timber from our disafforested plains, and our habitations of wattled walls and clay.

Extravagant and caricatured as these speculations appear, they are but a sober moiety of the results that must follow a strict and logical application of the principle of England for the English. With the evolution of intelligence and civilisation, nations, and, above all, England, with her world-wide possessions, have become so inextricably inter-dependent, while tending to grow still more so, that no one state can isolate itself, nor, if isolated, could maintain its rank in the comity of nations. This inter-dependence is the truest self-dependence. Nor, since England can claim a history, has there been an age when we can say here the people were self-contained, and here began their foreign dependence. If, also, the principle of dependence on foreign resources is vicious in its inception, it is irrational to make distinctions, while also giving offence, by opening our ports to certain classes of merchandise and laying an embargo on others.

From the days of Roman domination, a distinction has been made between home and foreign industries, in view of favouring the first at the cost of the second. Within the borders of any one empire, however wide, free intercourse goes without saying, for it is essential to the progress and well-being of the state. Craft restrictions were enforced by trade-guilds with the object of confining production to castes, for the double purpose of securing the highest excellence of industry and skill and of localising corporate profits. But the end of production was interchange; and interchange, so far as the means of communication admitted, was promoted and developed to the full. If a power annexed a province or a neighbouring state, a community of interests followed as a matter of course. Had Napoleonic ambition Gallicised Europe, with the disappearance of political frontiers would also have disappeared frontier dues. Could we conceive of a universal empire of the world, we must likewise conceive of a system of universal free intercourse and trade.

Now the point to arrest attention is, that commercial freedom within a state, is a right conferred as essential to well-being, to the common good of every class of citizens. Let the same state be divided into a number of, nominally, independent petty powers, and the well-being of each is sought to be promoted, while its industries remain unaltered, by prohibitory tariffs and differential dues. The most notable illustration of this inconsistency is furnished by the heterogeneous kingdoms, principalities, and duchies of Germany of old. Each petty state exacting separate frontier dues on merchandise in course of transit, and at the highest rates, so hampered commercial intercourse, that the Zollverein grew into a necessity to modify the rigours of the system by the economical collection of tolls, once for all, upon the entry or despatch of goods. German dreams of unity being realised, the Fatherland less needs a Zollverein within its own borders, than as a mutual advantage in its intercourse with surrounding states. As a stimulus to production, free commercial intercourse, which is right and not to be denied, within the bounds of an empire of continental extent, must be equally right and beneficent in its effects, though that empire may be cut up into a multiplicity of small independencies.

The argument of Protection *versus* Free-trade is one between producers and consumers; as that of capital and labour is one between employers and employed. In both instances there is presupposed, by the superficial, an antagonism which does not exist. Producers and consumers, as also capital and labour, are ancillary and not rivals to each other. Without capital, labour would have no raw material to work upon; without producers, consumers would have nothing to eat or to wear. Each exists for the other. Protection implies more than this. It implies that consumers must not only give fair value in exchange, but a bonus besides; in order that producers may live not only for consumers, but, in a measure, *upon* them. This inequity would be less glaring if producers were bound to any special commodity or line of production. So far from this being the case, they enjoy absolute freedom of choice, of time, place, circumstance, and produce. If they err, they are at perfect liberty to divert their capital to more profitable employment.

Consumers, on the other hand, *must* consume. Existence is impossible without the necessaries of life. Consumers therefore claim the right to buy what they like, where they like, when they like, and in any quantity they like. If one producer does not please them, they claim the right to go elsewhere. Here the reciprocal obligation ends, and with this perfect liberty of action, it is more possible to live in concord and goodwill, and for wealth to increase, than through any system of interference or artificial restrictions, whether legislative or otherwise.

What has England reasonably to fear from more fertile soils, plus the cost of thousands of miles of land and water transit? What from the rivalry of the less richly endowed neighbouring races? She has cast the die and turned up highest. During a long period of trade depression, not absolute but relative, gloomy forebodings have beset the mind, that our commercial rank declines, and we jump to conclusions that the rivalry of poorer peoples is undermining our wealth, while the industrial strain and pressure are far severer abroad. Croakers have abounded in every age and in every country, and are ever ready with empirical remedies for temporary trials and reverses. Such maggots of the brain are the proposals to prohibit American butterine to remedy the fall in value of Irish butter, and to deny ourselves cheap and useful foreign manufactures, so as to revive our drooping trade. So also are the ideas of closing our hospitable gates to the troops of Germans, who make England their pasture, and honour us by regarding our country as better than their own. Their devotion to the Fatherland cannot withstand the high wages of England. Multitudes of Germans in the emporium of London oust the like number of English clerks, who cannot subsist on the pittance that contents a foreigner, and prefer to live on their friends.

Shall we drive these Germans away? To do so would violate the proud claim of England to be the refuge of the destitute, the haven of safety, the abode of plenty, whose freedom spreads from her citizens to the human family at large, and, to impair which, she challenges the world.

Germans, associated with the English in productive labour, equally with Englishmen proper, add to the sum of national wealth, except that, as foreigners, they are placed at a disadvantage. In the end, as a rule, they blend with English blood, and the graft takes successfully, from the near alliance of the scion with the stock. Thus is repeated the process of the mingling of races, which has been going on without intermission since the days of the Britons, and from which springs the many-sided genius of our insular people. The empiricism of checking this natural evolution meets its counterpart in Mrs. Partington's effort to sweep back the Atlantic with a broom.

If England is destined to maintain her ascendency and keep in the forefront of wealth and civilisation, a less shallow philosophy must guide her counsels. In the days of manual industry, her stalwart sons, by sheer force of muscle and vigorous nerve, kept easily in the van. Mind has more than ever entered upon the domain of labour. Physical prowess may be a natural development; skill and aptitude come from practice; but intelligence comes from special training. In the buoyancy of insular health and strength, intellectual capacity, as a condition of industrial success, has not always received the consideration which its profound importance demands. The altered conditions of productive enterprise open a field where the race is not always to the swift or the battle to the strong. The niggard resources and, necessarily, the backwardness of other states, in the former stage, literally, of handicrafts, forced them to welcome and gladly apply every industrial gift from science and art, and by an elastic training of the young in industrial and commercial knowledge, to start them with an intelligent aptitude for productive labour and the capacity to foresee and adapt themselves with advantage, to every impending change.

England, standing on the old ways, has trusted to leaders, while the masses have been left to the rule of thumb. Gradually have her philosophers, chemists, engineers, and mechanicians, done the state service. The desire grows that the army of labourers should work *with* as well as for their leaders.

Education has started its beneficent mission, and, as right principles more and more prevail, will be specially directed to the industrial career of the young, with the certainty of rich national fruits. In education alone, our eyes discern success. An educated people will be a prosperous people. There is no finality to production, to the economic virtues, mental capacity, the discoveries of science, and the genius of invention. England does not willingly admit herself to be lacking in intelligence of practical application, and must deign to learn from her neighbours the lesson of their material advance. The same spirit of enterprise which bore her at the head of less enlightened competition, will keep her well to the front when such issue is joined.

In these considerations lie the solution of the problem of the German clerks. Not salary but capacity must solve the question. We have seen that average wages cannot be settled by an accountant, but are fixed by the magnitude of the wages fund, which bears relation to the capital invested in production. An economic maxim states an immutable fact, that, one with another, a man gets what he is worth and is worth what he gets. English clerks do work, have worked, and will have to work, at a Continental wage. Every rate of wage is earned in the industrial course, from that of the office-boy to confidential manager, and any rate is better than nothing. An aspirant for service who finds every desk filled in the sphere he would prefer, does not fold his arms or put his hands in his pockets, but seeks the next best opening, and the next, and next. Thus every industrial grade is filled, and real merit mostly leads to promotion.

Let us finally, but not invidiously, ask, Which of the classes of clerks, German or English, possesses the best scientific knowledge of commodities, of technics, and of the history of industry and commerce? Which are the best linguists and general scholars, and, therefore, the best commercial correspondents? Which class is the most earnest in details and devoted to office duty? Which the most studious and thrifty, and willing to bide its time for advancement, and contented? Admitting an equality of trustworthiness and fidelity, let our young merchants and clerks excel in these high industrial qualifications, and they never need to fear their German compeers, or an absence of demand for valued productive powers.

THE

NATURAL DIVISIONS OF TRADE THROUGHOUT THE WORLD.

London designations of the Shipping Trades, comprising the World's Commerce in 1887.

No.	Trade designations.	Remarks.
1	Baltic,	all the Baltic seaboard.
2	Black Sea,	includes Danubian provinces.
3	China,	includes Tonquin.
4	Cape,	South Africa.
5	Colonial,	Australia, New Zealand, Tasmania.
6	Canadian,	described under the "States" trade.
7	General,	coast between Gibraltar and Hamburg.
8	Indian,	Hindostan and Burmah.
9	Island,	various trade islands.
10	Japan,	Japanese islands.
11	Levant,	includes Syria and Mesopotamia N.
12	Mediterranean,	between Gibraltar and the Levant.
13	Mexican,	includes Central America.
14	North and Central Asian,	includes Turkestan.
15	Persian Gulf,	Persia, E. Afghanistan, Beloochistan and W. Arabia.
16	Red Sea,	both shores and Abyssinia.
17	Straits and East Indian,	Singapore and E. I. Islands.
18	States,	United States E. and W. coasts.
19	South American,	all S. America except west coast.
20	United Kingdom,	coasting and port trades.
21	White Sea and Norway,	Norway and North Russia.
22	West African,	includes Morocco.
23	West Coast,	South American west coast.
24	West Indian,	Islands.
25	Zanzibar,	includes E. coast Africa and Mozambique.

PART IV.

ON THE NATURAL DIVISIONS OF COMMERCE.

TRADE-AREAS.

The Map in Pocket must be consulted for Trade-Areas—26 in number.

attempt made, as far as is known to the author, to enumerate the whole of the designations of our shipping trade, and at the same time to localise each one specifically within its true boundaries.

A single Natural Division will sometimes of necessity include several nationalities; the Baltic trade, for instance, comprises the Scandinavian States with part of Russia.

At other times one Nationality will appear in two Natural

Divisions or more. Russia enters largely into the Baltic *and* Black Sea trades, while her Eastern territory, Siberia, enters into North Asiatic trade.

"Colonial" trade ranges over a vast area, and is too diversified in its elements to be generalised. Clearness and conciseness can, however, be brought into the term by geographical classification.

The areas and produce of the Dominion of Canada, of the West Indies, and of Australasia, are as distinctly marked by us as those of the Baltic and Black Seas.

By pursuing investigation on these lines, through the series of areas, the mercantile student arrives at a comprehension, not otherwise obtainable, of the magnitude and true meaning of the world's commerce. He can grasp any part of it, mentally, and estimate its importance, with the desirableness or otherwise of its expansion.

Many successful merchants have begun their career with feeble knowledge of the natural history, or the geographical range, of the produce in which they traded.

Few but feel that it would have been well for them to possess such information. Exact and extensive knowledge of all ordinary commodities does not render a merchant the less a good man of business.

Let us now trace the application of these principles in the Baltic and other trades; which are all treated as follows, — according to their geographical areas, whether single or several.

A. *An explanation* of the "Trade," as distinguished from others.

B. *Railways* and trade-communications, to and from the area,—localised.

C. *Ports*, geographically named.
D. *Towns*.
E. *Minerals*, localised.
F. *Agriculture*, localised.
G. *English goods*, how and where introduced.
H. *Transit*, to and from the area,—with distances.
I. *Remarks*, *Seasons*, *&c.*
J. *Centres* of trade in the areas.

BALTIC TRADE.

This trade embraces geographically all Sweden, Russian Finland, Central Russia, North Germany and Denmark, with a few ports in South Norway.

Area.

1. *Sweden.*—South Sweden covering *Gottland*, or *south* of an imaginary line drawn in a semicircle from 59° 20′ N. on the Norwegian frontier, to 58° 40′ N. on the Baltic sea-coast.
2. From this line *north*, embracing "Sweden proper," following the recognised geographical division of Sweden proper to about 15 miles north of Fahlun, thence direct E. to the coast; or in other words, from 62° 23′ on the frontier to 60° 50′ on the coast.
3. The whole of Sweden *north* of this line.
4. *Finland.*
5. *Central Russia*, lying between an imaginary northern line drawn from Serdobol, 61° 50′ N., to the mountains beyond Solikamsk, 59° 40′ N., and one to the southward from Lublin, 51° 18′ N., to the mountains 90 miles beyond Orenburg, and in lat. 51° 50′. The two lines being joined on the one side by the Urals, and, on the other, by a line extended N. from Lublin to the Baltic Sea at Königsberg.

6. *North Germany*, west of the Lublin Königsberg line in area 5 to a line drawn from Kiel to Altenberg, and, easterly, Altenberg to Lublin.
7. *Denmark.*—Also *South Norway*, from just north of Stavanger, 59° 20′, to the north end of L. Mjosen, thence S.E. to the frontier.

By "Baltic trade" is understood, commercially, the transit of goods to and from ports beyond Elsinore, in the Sound, just south of the Kattegat.

The term applies to the *port* of shipment or discharge, and *not* to the ultimate destination of the goods, or the original field of produce. For instance, a cargo of coal bought for final delivery at Moscow, might be sent either *viâ* the "Baltic," or the "Black Sea," and similarly with produce in return.

Comprised under "Baltic Freight" are:—Ashes, bristles, tanned hides, bees'-wax, flax, feathers, grain, pease, beans, tares, barley, diaper, drillings, hare-skins, hemp, hides, horse-hair, horse-manes, isinglass, linseed, linens, oats, mats, pitch, sheetings, sail-cloth, rye, sowing linseed, tar, tallow, wool, wood (deals, firewood, &c.), and oil; hemp being the *basis* of this trade.

The commercial difference between engagement in the Baltic and American "timber" trade is,—that the produce of the former consists of "*wood*," signifying deals, battens, and boards; the latter, "*timber*," meaning hewn or sawn logs, that is logs sawn longitudinally, but not trimmed into planks or deals.

Planks are *wide* deals. Then there are sleepers (another species of wood cargo). These come, principally fir sleepers from Riga; and oak, which are much heavier, from Danzig; Bordeaux and Bayonne also supply fir, procured from the neighbouring Landes, and shipped either creosoted or plain.

Grimsby is the chief receptacle for Riga fir, Calais and Ostend for Danzig oak, Algeria and South Spain for the French fir sleepers.

There is nothing peculiar in the principles or the practice of the *Baltic Trade*—of course the essence of all trade is "reciprocity;" Goods from England go for consumption into countries from which we import local produce in exchange; the home consumption in each place having been first satisfied, the surplus overflows into the shipping trade.

However money may facilitate interchange, trade itself is essentially *barter*, goods or commodities on one side being valued in goods on the other side. Freights cannot be of a haphazard character. Traders visiting distant ports, ought to know the nature of the produce to be expected there, be it agricultural, mineral, or manufacturing; and also the extent of the demand in the markets at home for such special produce. Further, they must know the commodities most in demand at intermediate ports, and at home freight their vessels so as to get the greatest value in exchange.

Shipowners, as such, are not cargo-owners or traders. If they are merchants also, they pursue two distinct divisions of commercial industry. Their primary business is that of calling, under orders, from port to port for cargoes awaiting them.

Shippers, proper, are the merchants at home, who in their offices transact the business of collecting cargoes, to be despatched outwards; and their agents abroad, collect return cargoes in readiness at the discharging or loading port.

The recognised areas over which the commercial transactions of these trade agents usually range, are marked upon the maps, or the "areas." The responsibility in a trade agency is great. The agent must needs possess good geographical, industrial, and political acquaintance with the country in which he is settled. He must know its productions, its means of communication, and its markets. In personal intercourse with native traders, he must be able to read character, to inspire confidence, and to know whom to trust.

These intelligence and foresight are required on the part of the merchant at home and his agent abroad, to enable them to meet fluctuations in supply or demand,—whether arising from vicissitudes of the seasons, from changes of policy, or, seemingly, from caprice. Their efforts would be directed to minimise the effects of such fluctuations, and to equalise transactions; providing nevertheless for the tendency of trade to increase.

Mere luck—or ignorance of these principles—cannot lead to success: the violation of them alone lowers honourable commerce into speculation, with the chances of a lottery: adherence to them is the sole basis of permanent commercial prosperity.

Area I.

Referring to a map of the Baltic, we notice, along its western shore the populated districts of Malmö and Gothland, conveniently situated for sea-board communication.

Railways and other communications.—The Gotha canal running from Gothenburg to Söderköping, joining the lakes of Wener, Wettern, Roxen, Glan, &c., gives the country round at least an easy means of access to the ports of Norrköping, Söderköping, and Gothenburg or Uddevalla, and on the route, to the inland towns of Wenersborg, Lidköping, Mariestad, Carlstadt, Jönköping, and Linköping.

The main line of railway running from Stockholm to Malmö, a distance of [illegible] miles, serves the town of [illegible] ninge, joins here the Linköping and sea-port lines, and continues to near Ekesjo, where the line from Oscarhamn to Jonköping, Uddewalla, and Gothenburg crosses.

A few miles further south, the line branches to Wexio, Calmar, or Carlscrona, and to Carlshamn; then to Lund and Malmö, with further crossing lines from Helsingborg and Engelholm to Christianstadt and Solvitsberg, also to Landscrona and Ystadt, the most south-easterly port. There is also a main through line from Stockholm to Christiania, by Carlstadt and Arvika into area 7.

Ports.—The principal in this area are Engelholm, Helsingborg, Landscrona, Malmö, Ystadt, Christianstadt, Carlshamn, Carlscrona, Calmar, Oscarhamn, Westerwik, Soderköping, and Norrköping.

Towns.—Bovas, Askersund, and Trolhaeta, notable for matches and other wood-work, are the only other towns of sufficient importance to be referred to.

Agriculture.—This area may be considered *the grain district* of Sweden. It produces, in some abundance, barley, buckwheat, beans, flax, hemp, oats, pease, potatoes, and rye; also in some favoured places, hops, madder, and tobacco. Wheat is grown, somewhat sparingly, in the south, and is used for home consumption. Oats may be considered the *staple* cereal export.

English Goods.—English goods, in exchange, consist, mainly, of coal to Elsinore—not on the mainland of Sweden—Helsingborg and Carlscrona, the first being an important coaling station for vessels passing to and from the Baltic, and the latter being entrepôts for coal, for consumption on the railways, in the smelting-works and factories.

General goods, English manufactures, hardwares, &c., are sent to Norrköping.

Area 2.

Proceeding northward, Stockholm and Gefle embrace all the district known as "Sweden proper," and covering Area 2.

Railways, etc.—This district is served by the waterway, joining lakes Malaren and Hjelmaren, also Barken and Wessman; and the rail from Fahlun and Lake Siljan, *viâ* Gefle, also from Arvika and Lake Wennern to Stockholm, by which the minerals, manufactures, and produce are conveyed to the ports for shipment.

Also, by a central railway line to a point close to Soderhamn, *viâ* Upsala and Sala, now continued into Norway.

Ports.—Stockholm, Osthammar, and Gefle.

Towns.—Besides the ports are Örebro, Linde, Fahlun, Upsala, Westeras, Sala, Hedemora, and Arvika.

Minerals.—This is the *mining* district. *Gold* is found on the uplands above the lakes, but it is little worked owing to the cost of labour and fuel. *Silver* in small quantities near Fahlun and Sala. *Copper* at Fahlun, which is here and in the neighbourhood smelted to a considerable extent. *Cobalt* mines at Örebro. *Iron* in immense thicknesses in all these areas, but little smelted on account of the cost of fuel.

The most celebrated mines, the produce of which is convertible into the finest steel, are at Dannemora, near Upsala; this product is shipped from Örebro, and bears the name of that town.

There are other good mines at Fahlun, Gefle, Westeras, Carlstadt and Örebro. *Porphyry* quarries in various parts. *Salt* at Helsingborg and other districts. Alum, lead, marble, nickel, sulphur, and zinc also occur.

There is *coal* of considerable extent in various parts of Gottland.

Agriculture, etc.—In the northern range of this area, we reach the land *of forests*, with their produce of pitch, resin, tar, and wood.

English Goods of every kind are sent to Stockholm.

Transit.—The route to Stockholm is *viâ* the North Sea and the Sound, being 1127 miles, and accomplished in about four days. There is regular steam service during the time the Baltic is open, between England and Stockholm.

Area 3.

Proceeding north, the whole trade, as far as towns are concerned, is confined to the sea-board.

Forests extend to the mountains, and the timber is sent to the sea mostly by the rivers,—named similarly as the ports at their mouths. Soderhamn is the most favoured port, having, besides the sea-board, railway communication with the south; this line is now extended to Ostersund and across the frontier to Drontheim in Norway, *viâ* Storlien, making a direct "thoroughfare" between Stockholm and Drontheim, a distance of 530 miles.

Ports.—The principal are Ljusne, Soderhamn, Hudikswall, Sundswall, Hernosand, Umea, Skelleftea, Pitea, Lulea, Calix, and Haparanda.

Towns.—The only inland town of importance is Ostersund, on lake Storsjon, with saw-mills and foundries; there is little or no agriculture, some cattle-rearing, timber, iron, and copper are the chief resources of this district, though the metals scarcely more than pay the cost of working.

Agriculture, etc.—Some flax and hemp are grown, and shipped at the southern ports, but the main resources are pitch, resin, tar, timber, and fisheries.

There is some trade in dairy produce.

English goods are introduced, chiefly through Stockholm.

Transit.—The northern ports depend largely on the line of steamers running from St. Petersburg to Tornea; or on cargo steamers loading for England and elsewhere.

Remarks.—The real forest-land has its limit about 64° N. latitude. Although the more *northern* ports of this area ship a fair quantity of wood, it is as nothing compared with the timber trade of the *southern* ports.

Flax is of excellent quality. Fishing is also vigorously carried on, and the fish exported. Dairy produce is general throughout these areas.

Area 4.

Leaving Sweden, we enter Russia; the forests here are not so dense; trade is more limited, as evinced by the small number of ports.

Railways, etc.—Down to 61° N. the inland communication with the sea-board is dependent upon rough road and stream.

The main line of rail from St. Petersburg to the Gulf of Bothnia touches the town of Wyburg, and runs to Fort Gustafsvern Hango, the nearest point to Stockholm, and is crossed, just south of the town of Tevastehus, by a line from Abo to Lake Nessi, Tevastehus, Helsingfors, Sveaborg, and Borgo, and enables the producers of this country both to utilise the lakes, and also to find an outlet at these ports, in preference to those in the Gulf of Bothnia. This line is now continued northwards to the boundary of Sweden.

This area is generally flat.

Ports.—Tornea, Uleaborg, Jacobstadt, and Nikolaistadt, with Vasa—these three last are but little known for English commerce—Björneborg, Nystadt, Abo, Helsingfors (Sveaborg), Borgo, Friedrichshamn, and Wyburg.

Towns.—Beyond those already named, are, Kajana, with outlet at Uleaborg; St. Mikhel, Kuopio, outlet at Wyburg, and Serdopol, outlet at St. Petersburg.

There are no manufactures in a trade sense; only a few saw-mills; the trade is transit; an exchange of butter, fish, furs, game, and deals is made for linen, flax, hemp, and manufactures, chiefly for home use.

Minerals.—Copper, graphite, iron, and lead are found in Finland; limestone and slate near Abo; the iron industry giving important work to the sparse population.

The mineral resources remain much undeveloped.

Agriculture, etc.—In a trade sense, there is no agriculture until we reach the neighbourhood of Abo, and the shores of the Gulf of Finland, where barley, beans, berries, flax, hemp, pease, potatoes, and a little tobacco are cultivated for export.

The forests constitute the chief wealth.

Tallow is exported at Wyburg, and a few coarse woollens, sail-cloths, and tobacco at Nystadt and Helsingfors: there are also pitch ovens at Jacobstadt.

Sawing mills and necessary timber work form the staple industry; with a little spinning, weaving, distilling, and sugar refining. Farm produce, to a small extent, is also exported.

English goods through Wyburg and St. Petersburg: consisting of textile fabrics, hardware, and other commodities.

Transit.—By steamer during the season from St. Petersburg to Tornea and Stockholm.

Stockholm to Tornea is about 500, and Stockholm to St. Petersburg about 400 miles.

Area 5.

The centre of the "Baltic trade" is at Cronstadt (St. Petersburg); and at Reval for cotton imports.

The coal shipped during the season to Cronstadt amounts to many thousand tons, thence scattered over the country by the lines of railway running from St. Petersburg. This station also absorbs our English manufactures and some iron. Reval is the centre for the cotton shipped at New Orleans (U.S.) for the Baltic.

Railways, etc.—All the country lying between the Ural mountains and the Volga is dependent upon the rough roads, streams, or canals for the conveyance of produce to the shipping ports.

The "Maria," system of canals in Russia is admirable, and so arranged that there is uninterrupted communication from the Black Sea to the Baltic, and from the White Sea to the Caspian.

Russia in its eastern districts is badly supplied with railways, but its western is well served.

Note the main line from St. Petersburg, through Moscow, to Orenburg, by the towns of Valdai (Bologœ), Tver, Moscow—branching here for Jaroslav, Vologda, also Vladimir, Kineshma, and Nijnii Novgorod; Riazan, Penza, Samara, and Orenburg; continuing, in a southern area, in an uninterrupted line to Vladikaukus. (See European "Thoroughfares.")

Half way between St. Petersburg and Valdai is a branch to Novgorod, on Lake Ilmen, and again just below Valdai, to Rybinsk, on the river Volga.

St. Petersburg to Narva, Dorpat, Reval, and Port Baltic.

Also, main line from Brest-Litov running through Minsk, Smolensk, Moscow, Vladimir, and Nijnii Novgorod.

The main cross-lines are Libau and Riga, on the coast, joining at Dunaburg, to Vitebsk, Smolensk, Orel, and the south.

Also Königsberg and Libau, meeting at Kovno for Vilna, Minsk, and the south.

There is a north to south line from Vologda, by Moscow to Tula, Orel, and the south.

The river Volga, with a course of about 2200 miles, and navigable for a great portion of its length, serves the towns of Samara, Simbirsk, Kazan, Nijnii Novgorod, Kineshma, Kostroma, Jaroslav, Rybinsk, and Tver.

Other towns are dependent upon the highways, and, specially, upon smaller rivers, or branches and canals, which are very numerous, intersecting the country in all directions.

Ports.—The chief ports in this area are—Cronstadt, Narva, Reval, Pernau, Riga, Mitau, Libau, and Memel.

Towns.—Petrozavodsk, Viatka, Velsk, Solikamsk, Tilsit, Perm, and Ufa. For details of local industries at principal towns, see tabulated list.

Minerals.—The Ural Mountains, on their Asiatic side, abound in copper, china-clay, gold, marble, platinum, rock-salt, and superior iron. The Altai Mountains are rich in copper, gold, iron, and silver, also lime and sandstone. Jasper is extensively worked. *Gold* in Orenburg and Perm. *Iron* round Valdai, Vitebsk, Smolensk, Novgorod, Tula, Tambov, Vologda, Vladimir, Viatka, and Penza. Tula may be styled the Birmingham of Russia. Coal is also worked round Tula and in Poland. Perm has important copper, iron, and platinum stores in its neighbourhood; Penza boasts sulphur and vitriol.

In most places of this district are found building-stone, bog-iron, clay, gypsum, limestone, naphtha, potter's clay, salt, slate, saltpetre, sandstone, and sulphur.

Agriculture, etc.—Agriculture is a staple industry: barley, flax, hops, hemp, oats, rye, tobacco, and wheat growing luxuriantly in all parts of this central area.

Riga is a very important seaport for cereal, flax, and timber export; fir sleepers also rank high. Memel is noted for its supplies of "red deals."

The forests are valuable and very extensive. Cattle rearing and fishing are pursued in the lower parts of the Volga.

Smolensk has a trade in linen and paper.

From nearly all parts are obtained butter, bristles, cheese, caviare, canvas, coarse linens, cordage, cattle, furs, hemp, hides, horses, horse-hair, horse-manes and tails, isinglass, leather, linseed, pistachio nuts and oil, potash, pitch, skins, tallow, tar, timber, vegetable oils, wax, and dairy produce.

English Goods of all kinds are introduced into this area, by way of Cronstadt, Libau, Riga, and Memel.

Transit.—The mail route to St. Petersburg is *viâ* Berlin, a distance from London of 1731 miles; by sea the distance is 1396 miles, and the voyage occupies from five to six days.

Steam lines run regularly through the season between the English and Baltic ports.

The distance from St. Petersburg to Moscow is 403 miles; Smolensk, 553; Vilna, 412; Warsaw, 652; Tambov, 682; Orel, 623; Orenburg, 1320; Nijnii Novgorod, 677; Vologda, 335 by rail and road; and Perm, 1080 miles by road and rail, *viâ* Rybinsk; 1392 *viâ* Joroslav, or 1395 miles *viâ* Kineshma.

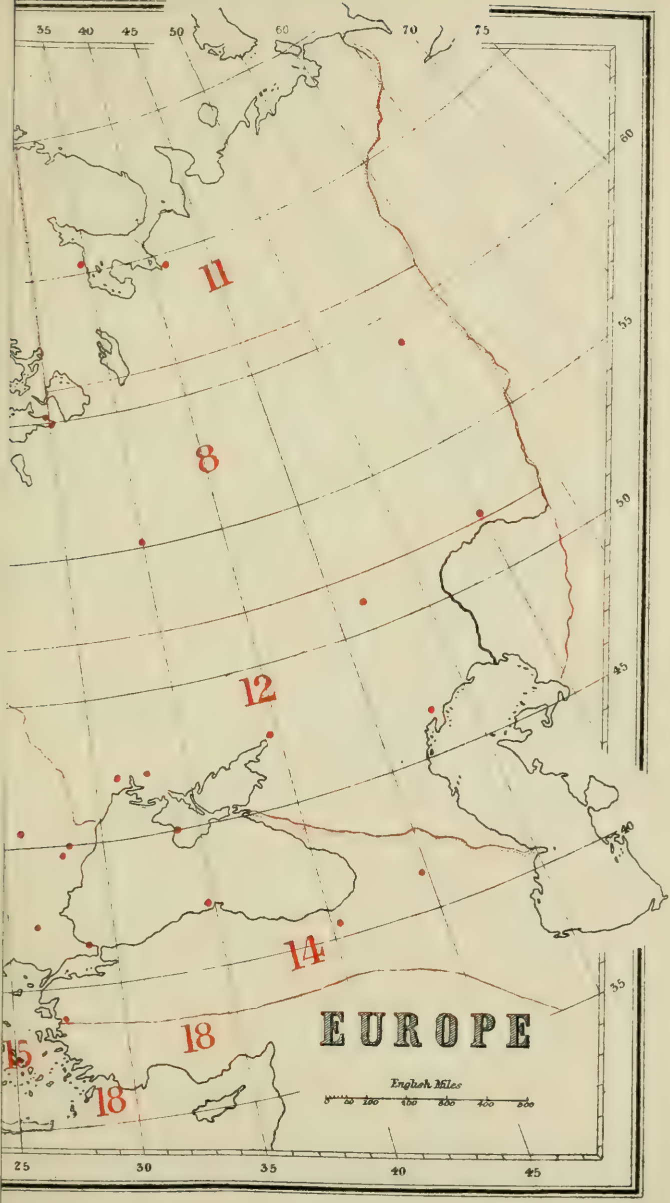
Area 6.

Entering this area, we have a small coast line, but a great wealth of inland towns, connected by an extensive network of railways.

These towns (centres in many cases of great and small railway systems and circles) have their own manufactures, maintained by the produce of the country, combined with imports.

The trade of the ports is mainly from the produce of the districts, and the importation of coal from England; the *manufactured* goods go by the regular steam service.

NS OF TRADE.



LIVERPOOL

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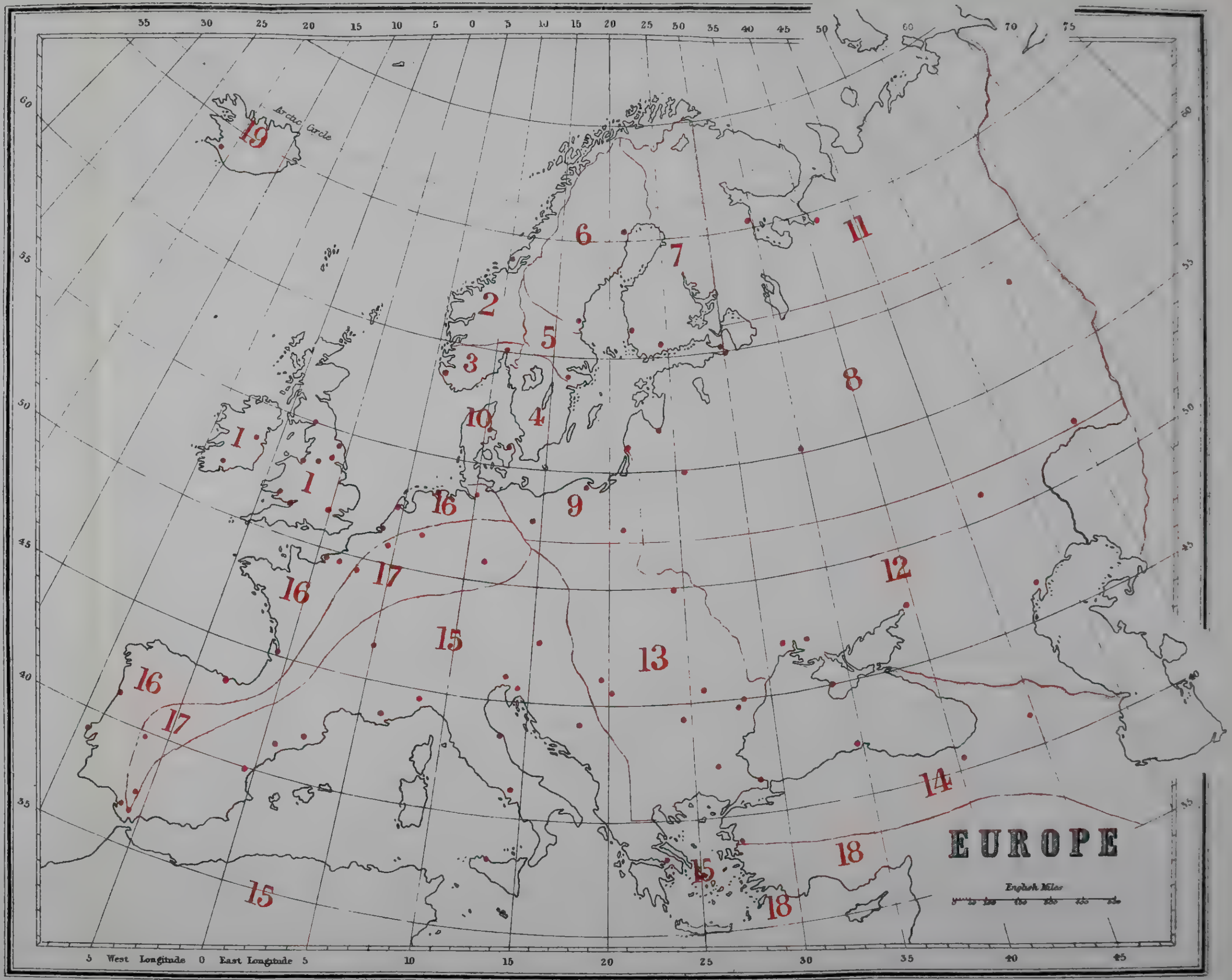
THE NATURAL DIVISIONS OF TRADE.

REFERENCE TO NUMBERS.

No. 1. **United Kingdom Trade.**
,, 2. **Norwegian** ,,
,, 3—10. **Baltic** ,,
,, 11. **White Sea** ,,
,, 12—14. **Black Sea** ,,
,, 15. **Mediterranean Trade** (North and South Shores).
,, 16. **General** ,,
,, 17. **Intermediate Zone.** This is a zone whence produce and manufactures find outlets to *any* sea-board, in accordance with ultimate destination, demand, or ease of transit.
,, 18. **Levant Trade.**
,, 19. **Island** ,,



PREPARED FOR J.R. YEATS MANUALS OF COMMERCE GEORGE PHILIP & SON, LONDON & LIVERPOOL

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Railways, etc.—The great line from Paris through Berlin, serves the central and northern districts of this area; commencing at Stendal or Magdeburg, to Potsdam and Berlin.

From Berlin through Kustring, near Woldenberg, Schneidemühl, Bromberg, Thorn, Briesen, Insterburg for Tilsit and area 5; or Berlin to Schneidemühl, Konitz, Marienburg, and Königsberg, this is the St. Petersburg mail route.

Also Berlin to Wittenberge, Schwerin and Wismar, joining the Magdeburg direct line through Stendal to Boitzenburg, Lubeck, Eutin, and Kiel at Wittenberge.

There is a coast line from Kiel to Butzow and Rostock, continued to Stettin, &c.

Berlin to Neu Strelitz, Neu Brandeberg, and Stralsund, thence coast line to Wolgast, Swinemünde, Pasewalk and Stettin, returning through Angermunde to Berlin.

Stettin to Stargard, Dramburg,—cross line Colberg to Neu Stettin,—Rügenwalde, Stolpe, Danzig, Dirschau, Elbing, and Königsberg for Pillau.

Königsberg continues the main line through Wehlau; and runs into Poland through Bartenstein.

Berlin to St. Petersburg also by way of Frankfurt-sur-Oder, Posen, and Thorn. Berlin to Vienna *viâ* Dresden and Prague.

Stettin into Austria through Stargard, Woldenburg, and Posen; to Breslau through Kustring and Glogau, or *viâ* Posen.

Berlin connects with Dessau *viâ* Jüterbogk, and Wittenberg: Dessau with Leipzig; Leipzig with Halle, on the one hand; Altenberg, Chemnitz, Freiberg, and Dresden on the south.

Leipzig to Posen and the main line, through Eilenburg, Ubigau, Kottbus, Krossen, and Zullichau.

Magdeburg to Breslau direct *viâ* Dessau, Ubigau, and Liegnitz.

In the south-west corner of this area, the railways between the different towns are too numerous to detail, but reference to the map will show that each branch is connected with a main line from one of the towns, and *place* each main line.

The river Vistula from Warsaw is the commercial waterway through Thorn and Bromberg to the Baltic at Danzig and Elbing.

The Oder through Breslau, Glogau, Frankfurt, Kustring, and Stettin. Posen is also on a branch.

The Elbe serves Dresden, Wittenberg, Dessau and Magdeburg to Hamburg.

These and smaller rivers, branches and canals, are extra means of communication with the railways, thus bringing easy transit to and from the whole area and the sea-board; besides the winter ice and snow service.

Ports.—These are Königsberg, Pillau, Elbing, Danzig, Colberg, Stettin, Swinemünde, Wolgast, Stralsund, Rostock, Wismar, Lubeck (Travemünde), and Kiel.

Towns.—Beyond the above, Rosenburg, Lowicz, Militsch, Meissen, Reichenburg, Gorliz, Bautzen, and Riesa.

Minerals.—These are not the chief source of wealth, but *bog-iron* and *alum* are found in the district of Königsberg.

Bog-iron, building-stone, limestone, and saltpetre, are prevalent at Posen.

In the neighbourhood of Breslau occur arsenic, copper, graphite, iron, lead, precious stones, and zinc.

Round Liegnitz, arsenic, alum, copper, cobalt, copperas, coal, iron, lignite, potter's-clay, and tin.

Frankfurt-sur-Oder supplies alum, copperas, gypsum, and lignite.

Stettin, iron; Dresden, antimony, copper, cobalt, copperas, coal, lignite, lead, marble, and silver.

Round Freiberg are found copper, cobalt, lead, and silver; Altenberg, brown coal and porphyry; Leipzig, limestone, marble, and ornamental stones.

Salt at Halle; alum, coal, copperas, gypsum, iron, lignite, limestone, potter's-clay, and sandstone round Magdeburg; and stone at Butzow.

Agate, amber, baryta, bismuth, jasper, manganese, nitre, nickel, onyx, porcelain-earths and sulphur, also occur in various places.

Agriculture, etc.—All districts of this area furnish barley, beans, flax, hemp, oats, pease, rye, vetches, and wheat.

Insterburg supplies almonds, linseed and timber; Königsberg, bones, feathers, hats, oilcake, rapeseed and wool.

Danzig, amber; Danzig, Lowicz, Schneidemühl, Rogasen, Konitz, Neu Stettin, Dramburg, Woldenburg, Jüterbogk, Wittenberge, Rosenberg, and Altenberg, are great cattle centres and markets.

Briesen is famous for cheese: Neu Brandenberg deals in hides, paper and rags.

Magdeburg has a trade in buckwheat, cereals, chicory and hops. Thorn in ashes, bark and hides.

Fishing is carried on at Colberg, Torgau, and Rugenwalde.

The textile industries centre at Elberfeld, Barmen, Chemnitz, Westphalia, and Silesia.

Prussia has very extensive fir forests.

Saxony and Dresden are famous for pottery, and china: but the famous "Dresden china" is made at Meissen, a few miles from that city.

Leipzig is the great book mart: Nuremberg has a name for clocks and toys: Breslau has well-known woollen manufactures. The fairs of Frankfort-sur-Maine are of universal repute: Chemnitz is regarded as the Manchester of Saxony.

The other exports consist of woollen and textile manufactures, sugar, and other manufactured commodities. Danzig is an important export town for oak sleepers.

English goods of all kinds are introduced by the mail railway lines through Germany from Hamburg or the North Sea ports of Antwerp or Rotterdam; also by steamers to the ports in this area.

Transit.—The ports are visited during the season by regular steamers from England.

The distance by sea from London to Rostock is about 813 miles; to Stralsund, 786; Stettin, 881; Danzig, 989; and Königsberg, 1016 miles: the passage being accomplished in from 3½ to 4 days. The shortest railway route to Berlin is *viâ* Brussels, Cologne and Stendal, 26 hours from London, and 746 miles.

The distance by rail from Berlin to Leipzig is about 130 miles; Dresden, 109; Breslau, 230; Posen, 153; Warsaw, 443; Danzig, 284; *viâ* Stargard and Stolpe, 312; Tilsit, 468; and Königsberg, 366 miles.

Area 7.

This area is really outside the Baltic, but is usually considered as part of the "Baltic Trade;" similar produce coming forward to the sea-board.

Uddewalla, Gothenburg, and Malmö have already been mentioned in Area 1.

There are no inland towns of note. The most important places are seaports, the depôts of the upland produce.

In all cases except Christiania, Drammen and Copenhagen, the district is dependent upon the inland roads and streams for conveyance.

Ports.—These are Stavanger, Christiansand, Arendal, Kragerö, Skien (Porsgrund), Tonsberg, Drammen, Christiania, Frederikstadt, Frederikshald, Uddewalla, Gothenburg, Warberg, Halmstadt, and Helsingborg.

In Denmark, Elsinore, Copenhagen, Holbek, Kallundborg, Horson, Vordingborg, Flensborg, Fredericia, Horsens, Aarhus, Viborg, Randers, Hobro, Aalborg and Frederikshavn.

On the islands are the ports of Nyborg, Svendborg, Odense, Middlefart, Nakskov, Bandholm, Nykjobing and Rodby.

Denmark has but few ports on its west coast, Ringkjobing, Husum and Tonning, the latter of which only is of commercial importance, exporting a large number of cattle.

The Danish ports are well served by the railway running up from Hamburg and Kiel.

Towns.—In Norway, Kongsberg, and Hamar on lake Mjosen, in direct rail communication from Drontheim in the north, to Christiania in the south; in Denmark there are but few inland towns, Hjorring, Skive, Veile, Kolding, Ribe, Tonder, Schleswig, and Rendsburg, all on the railway and, in all cases, within a short distance of the seacoast.

Minerals.—Mining produce is comparatively small; cobalt and silver ore are worked at Kongsberg; iron mines on the island of Lanjöe, near Kragerö; cobalt and iron near Drammen.

Agriculture, etc.—The herring fishery of Stavanger is its staple industry; the fish being shipped for general consumption.

Cattle and fishing also form part of the chief wealth of the Christiansand, Arendal and Kragero districts, together with timber brought down to the saw-mills, and for shipment.

Pitch, tar, iron and mill-stones come from the fiord on which Skien stands. Drammen is the centre of a large wood trade, chiefly in the form of battens, hoops, pulp and staves.

Other produce consists of a small quantity of pitch, tar, wool and malt liquors exported from Aalborg. Cattle rearing is an important industry.

Cereals are grown but not sufficiently for home consumption. Oats are the chief crop.

Dairy produce is also exported.

English goods.—The quantity of coal sent to the stations of Copenhagen and Elsinore is enormous.

These two ports form shipping entrepôts, for the mercantile marine.

Copenhagen also by its railway supplies the inland demand of Denmark by Kallundborg.

Transit.—The mail route is *viâ* Cologne and Hamburg, transit occupies two days.

The distance by sea is 715 miles and three days, to Christiania 656 miles and three days' voyage.

During the time that the Baltic is open there is steam communication to all ports from London, Hull, Newcastle, Leith, and occasionally Cardiff.

Season.—The *average* closing of the Baltic is the last of November and the opening in April or early May; between these dates cargoes are always procurable of wood, last year's cereals or the new harvest, with all the other commodities. Cargoes of some sort are *always* obtainable.

Centres.—As stated, *Cronstadt* is the centre of this trade: but as the seven areas represent such an extent of country, it is necessary to see what other ports constitute chief seats or capitals.

Cronstadt is situated on an island some 12 or 13 miles from St. Petersburg; it is the chief coaling station and shipping port of the Gulf. The harbour is perfectly safe and capable of accommodating a large fleet of vessels. The merchandise, which is nearly all loaded and discharged here, is sent to and from St. Petersburg by means of lighters, as it is not possible for vessels drawing more than ten feet of water to reach that city.

St. Petersburg therefore becomes a most important entrepôt and emporium: the railway lines and roads converging here bring the varied produce of a large area through this city and Cronstadt.

Owing to the rigorous climate, the port is seldom open for more than seven or eight months (April or May to November); the trade is therefore limited in point of time.

The city itself has considerable internal trade; it has its fairs and government factories of glass, ironwork, porcelain, playing cards, and tapestry: also private enterprises of shipbuilding to a considerable extent; leather and textile work, refineries, ship chandlery, and articles of vertu. The industries, with the transit (which is largely in excess of the local trade), make this a very important "trade centre."

Stockholm, the most important seat of commerce in Sweden, as well as the capital of the kingdom, is most beautifully situated; it secures by its internal communications a vast transit trade of timber and produce; has considerable coasting trade, and extensive intercourse with St. Petersburg. Being able to supply a "deadweight" of iron and steel, it ranks high in shipping circles, as an advantageous port.

Its local trade is insignificant compared with its transit, but it boasts some textile manufactures, ironwork, sugar refineries, and tobacco making. Its harbour is the finest on the coast.

Danzig is the most important German port on the Baltic sea-board, especially for wheat, which is stored and carefully watched in the vast granaries on the island of Speicher: also for oak sleepers, supplied chiefly to the French ports.

Newfairwater is its "deep-sea" port. Danzig has considerable local trade, manufacturing potash, ship chandlery, marine stores, textiles, tobacco, &c., with breweries, distilleries, dye-work, and refineries. It exports its own specialty, "Danziges Geldwasser."

This port takes a most important place among German general manufacturing and transit towns.

BLACK SEA TRADE.

The trade divisions. This trade is divided into three areas, bounded by imaginary lines, easily traced on any atlas as follows:—

Area.

1. All Russia, south of the Lublin Orenburg imaginary line in area 5, Baltic trade.
2. Asia Minor, north shore southward to a line drawn W. to E., from Smyrna to Lake Van, thence S.-Easterly to Tabreez and Reshd.
3. The Danubian provinces, including Roumania, Transylvania, Hungary, part of Bosnia, Servia, Bulgaria, Eastern Roumelia, and part of Roumelia.

Area 1.

The "Black Sea Trade" exemplifies the principle previously stated that "the essence of commerce is reciprocity." In the effort to sustain home industries, Russian policy has been directed to favour exports and restrict imports.

Only necessity will lead traders to ports where they may buy merely, but cannot sell. As other sources of supply opened out for commodities which have been regarded as specially Russian, trade has been diverted, merchants preferring intercourse with states which encourage a double profit on outward as well as inward cargoes.

The effect is very marked in the grain trade. Canada, the United States, Australia, New Zealand, and, recently, India, have, year by year, with rapid strides so successfully competed in the supply of corn, while placing fewer restrictions upon mutual interchange, that Russia, once the sole granary of Europe, has now to compete with others. Canada has, in a great degree, drawn the British timber trade from Russia, and is making efforts to secure that of hemp, the basis hitherto of North Russian commerce. The external or foreign trade of Russia, consequently, tends downwards, and must continue to do so, until the indispensable economic principle of reciprocity is accepted, and more frankly acted upon.

The bases of the "Black Sea trade," as settled in committee in London, are wheat and tallow, and on these the carrying of all other produce is calculated.

This consists of the following:—Wheat, Indian corn, beans, tares, lentils, pease, millet seed, dari, rye, linseed, rapeseed, barley, cotton-seed, oats, tallow, and wool.

Other articles as per the *Baltic* list.

Our main *European* resources of grain, as well for English markets, as the *transit* to other ports by English vessels, lie in the "Black Sea," where the granaries of the great shipping ports are kept full, watching only the turn of the markets in the centres of trade, to induce a pouring out of thousands of quarters to be carried to the many ports on the coasts of Great Britain and Europe.

This trade, as will be clearly seen, is closely allied to the "Baltic trade," why?

Because the field of production is the same, the *outlet* only being changed; according to distance and the available means of transit.

The whole of Southern Russia in this area, south of that portion already described under Area 5 Baltic trade, is a vast plain of grain-bearing country, having its only outlet (naturally) in the Black Sea.

Canal communication from the Black Sea, and the Caspian to the Baltic, as well as the railway lines, are costly modes of transmission compared with the *natural* ease of transit in the flowing or direction of the rivers, which in this area are numerous and navigable.

Further, the immense resources of the Danubian provinces, nearly all grain-producing, have also their only *natural* outlet in the Black Sea; while the eastern shore round Poti and Batoum, with its wealth of petroleum oil, and the northern shores of Asia Minor, combine to make the "Black Sea trade" a most important element in commercial and shipping business.

We will now trace the producing districts, their towns and communications.

Railways, etc.—Southern Russia is better provided with railways than the north.

Taking our starting points in Area 5 of the Baltic division of trade, at Cracow, Lublin, Minsk, Orel, and Tambov, we notice the railway lines, nearly all leading to the shipping ports.

From Cracow to Odessa direct, *viâ* Lemberg and Toultchin.

Also Cracow to Odessa, *viâ* Jaroslaw, Lemberg, Czernovitz, and Jassy,—branching on the south for Galatz, Ibrail, Rutschuk, and Varna,—and on N.E. for Kichenau, Tiraspol, and Odessa.

Lublin to Odessa *viâ* Lutsk, Jitomir, and Toultchin.

Minsk to Tchernigov, Bochmatch—branching to Kiev—Krotevetz and Kharkov, where this line joins the rail from Orel through Koursk, branches to Poltava, Elizabethgrad and Nicolaiev; or runs direct either to Alexandrovsk, Simferopol, and Sevastopol; or Taganrog and Rostov, there meeting the great through line by way of Tambov, *viâ* Voronej, Novoi-tcherkase, Rostov, and Azov, to Vladikaukus, whence the main road, extended a few miles over the mountains, reaches Tiflis, thence rail to Poti on the Black Sea, or Baku on the Caspian.

This is the main line from St. Petersburg through Moscow, making an uninterrupted railway line from N.W. St. Petersburg to S.E. Vladikaukus, a distance of about 1593 miles.

Tambov is also in railway communication with Sarepta and Saratov.

THE RIVERS are the Volga, having a course of about 2200 miles, and generally navigable, running into the Caspian Sea at Astrakan, with the towns of Charnoyar, Sarepta, Kamishin, Saratov, and Volsk, on its banks.

The Dnieper, about 1230 miles and practically navigable to Smolensk, running into the Black Sea at Kherson, connects the towns of Nikopol, Ekaterinoslov, Kiev, and Smolensk.

The Dniester with Kamenetz and Kichenau close to its banks.

There are several smaller rivers and tributaries, which, with the canals, form auxiliary means of easy transit to the sea-board.

Ports.—The principal are (Varna, Kustendje, and Sulina, which are noted in the Danubian area), Odessa, Otchakov, Nicolaiev, Eupatoria, Sevastopol, Kertch, Berdiansk, Mariūpol, Taganrog, Rostov, Azov, Poti, and Batoum.

Towns.—It will be seen, on reference to the tabulated list, that manufacturing towns are practically nil, the staple industries being agriculture and transit.

Many of the towns owe their prosperity to their splendid transit position on road, canal, or rail.

Besides those already named, we notice, Uman, Pavlovsk, Ekaterinodar, Stavropol, and Petrovsk, lying outside the main means of communication.

Minerals.—Round *Cracow* are worked coal, freestone, iron, and marble: *Kharkov*, coal; and *Eupatoria*, salt. Petroleum from *Poti* and *Batoum*.

From *Ekaterinoslav*, chalk, garnets, granite, lime, and salt: *Kertch*, salt and stone.

Tchernigov gives chalk, earth, iron, porcelain, and saltpetre: *Voronej*, iron and saltpetre.

Coal is also obtainable from the valley of the Donetz.

Salt in large quantities from *Kamischin*, *Saratov*, and *Berdiansk*.

Thus it will be seen that mining forms but a small staple in the pursuits of this area; and, with the exception of salt, hardly enters into our commerce.

Agriculture, etc.—Round *Cracow*, cereals, flax, honey, and pulse: *Eupatoria*, cereals, and skins: *Ekaterinoslav*, cereals, cattle, and silk. This town has an important wool fair.

In the gov. of *Astrakan*, caviare, and isinglass, with a most important fishery.

Batoum supplies corn, fruit, and rice: *Poti*, honey, silk, skins, wax, and wine: the district of *Podolia*, cereals, flax, fruits, hemp, hops, and tobacco: this gov. lies on the north side of the river Dniester.

The produce coming through *Odessa*, the entrepôt and emporium, comprises tallow (the staple), cereals, caviare, cordage, hides, isinglass, linseed, potash, sail-cloth, tar, wax, and wood.

Jitomir has an active trade in linen, silk, and woollen goods; also cereals, cattle, flax, honey, salt, tallow, wax, and wine. *Kiev* supplies cattle, dairy produce, grain, honey, tobacco, wax, and wood.

Tchernigov furnishes cattle, cereals, flax, hemp, and tobacco. *Koursk*, cereals, cattle, fruits, honey, leather, and wax.

Kherson gives cereals, cattle, and horses: *Kertch*, an emporium, with important fishing industry.

Voronej produces an abundance of cereals, flax, hemp, tobacco, and tallow: *Taganrog* is an entrepôt for brandy, cereals, caviare, fur, hides, iron, salt, tallow, wines, &c.

Pavlovsk supplies excellent fish, melons, and wine.

Rostov, fisheries. *Petrovsk* district, cereals.

Volsk has a large trade in corn and fish. The *Saratov* districts are fruitful in cereals, flax, hemp, hops, madder, and tobacco.

Tiflis being the emporium and entrepôt between Russia, Persia, and Turkey, has a very large transit trade in all produce and manufactures. *Berdiansk* and *Azov* are again vast emporiums, and enjoy a very considerable trade in oil-seeds, wheat, and wool.

Sevastopol is the import emporium for cotton from the United States. There is also some spirit distilled, which is exported.

It is evident from the above that agricultural produce is the staple of this area. *Wheat* may be taken as the *staple* export cereal.

The petroleum wells of *Batoum* are at this time bringing that neighbourhood into great repute, it being necessary to build "tank" steamers specially for the conveyance of this produce.

English goods.—Our English ports send a large quantity of coal to Odessa; but taking the Black Sea as a whole, the trade in this area, with the above exception, is mainly confined to English manufactures and commodities, which are distributed throughout the country in return for the native produce, and this only to a limited extent.

Transit.—There is a regular service of steamers between the Black Sea ports and England.

By sea London to Odesssa, 3410; Taganrog, 3680; Sevastopol, 3350; and Poti or Batoum, 3670 miles.

Area 2.

Railway enterprise has, at present, scarcely touched Asia Minor; and its resources, but partially worked, are confined, for the purposes of transit, to road and stream: the country being intersected by the old caravan routes from west to east and south. The existing railways are Smyrna to Magnesia, Kassaba and Alascheir, 105 miles. Scutari to Ismid and Ada Bazar, 94; more for residential use than trade, there is a prospect of quickly extending this line to Bagdad through Anatolia and Mesopotamia. Also Mudania to Brusa, 17 miles; Smyrna to Kassaba, 58; Ephesus, 48; Aidin, 81, and Seraikeuy, 144 miles. A line from the Gulf of Alexandretta to the main at Koniyeh, with extended branch to Erzeroum: a coast line near Trebizond to join the Bagdad trunk line in Sivas, and an extension of the Magnesia line *viâ* Kara-Hissar and Kutaya and of the Aidin line *viâ* Kir-Chehir to Koniyeh are projected and are being negociated for by the Porte.

The rivers that are available for transit are the Irmak, Sakaria, Suser-lu-chai, Gediz-chai and Germeile-chai: no towns have sprung up to utilise these rivers. Amasia and Sivas are the only ones of note actually *on* a river.

Ports.—Trebizonde for Erzeroum, Tireboli, Samsoun, Sinope, Ineboli, Amasserah, Ghemlik, Brusa port and Aidinjik on the sea of Marmora.

Towns.—Reference to the tabulated list will show the local industries of certain towns, and that, being situated on caravan routes, their trade is to a great extent "transit," and that they act as entrepôts.

Beyond those already named, we have Alexandropol, Erivan, Elizabethpol, Tabreez, Van, Erzeroum, Diabekir, Amasia, Tokat, Kastamuni, Angora, Germa, Kaiseriyeh, Koniyeh, Ushak, Akhissar, Afium Kara Hissar, Kutaya and Scutari.

Minerals.—Alum from Elizabethpol, and round Trebizonde. *Copper* from Trebizonde, Sivas, Tokat and Ineboli.

Meerschaum quarries near Koniyeh.

Iron from Elizabethpol and Sivas. *Gold* also from around Elizabethpol.

Sivas further yields alabaster, lead, marble, salt and slate. *Diabekir*, limestone. *Tokat*, limestone and marble; and *Ephesus*, marble.

The little port of Erekli, on the Black Sea, has some excellent coal in its neighbourhood.

Agriculture, etc.—Elizabethpol district produces cotton, cereals, linen, madder and tobacco: also silkworm rearing extensively. *Amasia* has an extensive trade in silk, with cereals, cotton, madder and wine.

Cereals, cotton, fruits, silk, and tobacco come abundantly from all districts.

Tabreez fabricates shawls. *Trebizonde* is the district of Indian corn, cereals, hemp, and linseed: this is also the chief route from Persia to South Russia and Constantinople, and is the emporium for exports, which consist of drugs, galls, oil, silk, tobacco, valonia, wax, wood, and wool; and from Persia, carpets, cotton, silk fabrics, shawls, skins, saffron, &c.

Erzeroom is an important centre for leather, carpet, and sword manufactures.

Sivas yields cereals, flax, fruits, hemp, sesame, tobacco, and wine. *Sinope* wood for shipbuilding. *Samsoun* sends forward its neighbouring produce of cereals, galls, gums, flax, hemp, hides, linseed, rice, silk, wax, and wool.

Angora is famous for its goats' hair—which is shorn twice yearly—and supplies goat skins, merino twists, dyestuffs, gums, madder, and wax. *Adramyti* yields valonia.

Brusa exports a well known silk; *Ghemlik* olives, silks, wines, and spirits. *Kastamuni* yields a wool hardly inferior to Angora; and *Koniyeh* cereals and flax.

Kutaya is one of the chief seats of Turkey carpet manufacture. *Erekli*, also, works morocco leather. The produce of this area is necessarily similar to the "Levant trade," the bulk of the exports working into the markets *viâ* Constantinople, and also, more especially, *viâ* Smyrna.

English goods.—The trade of the Southern Black Sea ports is principally with Constantinople *viâ* Scutari; and Odessa by local steamers and sailing vessels; English goods reaching the interior by the caravan routes.

Sinope is a coaling station between Constantinople and Trebizonde.

Transit.—The shortest route to Trebizonde is *viâ* Constantinople, thence by steamer about 800 miles.

The distance from Trebizonde to Tabreez is about 450; Erzeroum, 125; Samsoun to Amasia, 85; Tokat, 145; and Sivas, 190 miles.

Area 3.

We have now to consider the Danubian provinces, with their enormous advantages of river transit.

The river Danube is one of the greatest "business" rivers in Europe. Other rivers are noted for a wealthy town or so situated on the banks, near their mouths; but the river Danube, throughout its whole course of about 1650 miles, flows through pastures, cornfields, and forests, by villages and towns, and bears on its surface an immense carrying trade.

This river is navigable for steamers as far as Vienna and Ulm,—except just at the rapids between Kladova and Drencova; but for shipping purposes cargo-steamers do not load above Ibrail, although an occasional cargo is shipped by a light draft boat at Giurgevo.

With its course of so many miles and its tributaries, the Danube forms a natural highway for the produce of an immense district, which centres at Ibrail and Galatz, the emporium of cereals, tallow, and all the produce of this area.

The pressure is somewhat relieved by the railway from Tchernavoda to Kustendje *viâ* Medchedie, avoiding many miles of river, which here deviates considerably in its course.

Varna, likewise, acts as an outlet, by connecting with the Danube at Rutschuk, thus bringing the river within 140 miles of the sea, instead of 198 miles down stream to Ibrail, itself 110 miles from the river's mouth at Sulina. Many steamers load at the Sulina mouth, the grain coming down in lighters.

The produce consists, in the main, of cereals, with, in addition, tallow, wood, and wine, and the usual "Black Sea" goods, but the staple is grain. Barley is the *staple* cereal in Austro-Hungary.

Railways, etc.—Continuing the main line from Czernowicz, already mentioned in Area 1, we come to Galatz, having connection through Reni with South Russian ports.

Coming from the west, and taking Vienna as our starting point, we find local lines to Raab and Oedenburg, the latter extending south to Novi and Banyaluka, also to Buda-Pesth, at which place we may notice two main lines having the same terminus (Bucharest).

The more northern runs through Szolnok, on a tributary of the Danube, branching to Debreczin, Gross-Wardein, Klausenburg,—for Dees and Maros-Vasarhely, latter also on a Danube tributary,—and joining a more southern line *viâ* Arad, near Hermanstadt, and thence on to Ploechti, branching to Ibrail or Byrlat, and terminating this route at Bucharest, or Rutschuk (Giurgevo).

The more southern line follows closer to the river, by way of Szegedin, Temesvar,—for Arad or Baziasch on the Danube,—Kladova, Krayova, Pitechti and Bucharest; thence direct to Rutschuk, Rasgrad, Shumla, and Varna.

A main *cross* line runs S.W. from Gross-Wardein through Szegedin to Maria Theresiopel, Esseg, Chamatz, Senitza, and Serajevo (Bosna Serai).

Also, note the line opening out the south-east corner from Tatar-Bazarjik and Philippopolis or Yamboli to Adrianople and Dedeagatch, or Constantinople. And in the south central of this area, from Mitrovitza, Pristina, Skopia Koprili to Salonica.

The Danube itself connects Vienna, Raab, Buda-Pesth, Esseg, Neusatz, Belgrade, Baziasch, Kladova, Widin, Rahova, Nicopoli, Shistova, Giurgevo, Rutschuk, Silistria, Tchernavoda, Hirsova, Ibrail, Galatz, Reni, Ismail, Kilia, Tultcha, Sulina, and Boghasi.

Then two important tributaries on the northern bank serve Szolnok, and Szegedin, Maros-Vasarhely and Arad, and join the Danube between Neusatz and Belgrade.

Ports.—The sea-board is small, the Danubian ports being Ibrail, Galatz, and Tultcha inland, the Black Sea being Sulina, Kustendje, Baltchik, Varna, and Burgas; and Constantinople, Rodosto, and Gallipoli, on the sea of Marmora; on the Ægean Sea, Dedeagatch, and Salonica: these have to be taken in the "Black Sea trade," because they are the outlet for the same country and produce, although in a different direction.

Towns.—Besides the above,—Miskolcz, Erlau, Eperies, Visoka, Krassowa, Bosna-Serai, Novi-Basar, Fotcha, Prissend, Monastir, Vodena, Seres, Enos, Kostendil, Sophia, Pirot, Nish, Lovatz, Plevna, Trenova, Slivno and Misivri: with Salzburg, Brunn, Pilsen and Reichenberg in the N.W. of Bohemia.

Minerals.—With such an extensive area under consideration, it is impossible to *particularise* very closely, but the following will give an accurate *idea* of the minerals throughout the area.

Bulgaria supplies iron; round *Bosna-Serai* we find iron and copper worked, as throughout *Bosnia*, also lead, quicksilver, and the precious metals partially. The metals are worked with considerable skill throughout Bulgaria.

Marble is quarried at *Gross-Wardein:* throughout *Bihar*, of which district Gross-Wardein is the chief town, copper, iron and lead, with the precious metals in small quantities.

Arad has copper, iron and marble.

Round *Erlau* and *Miskolcz*, we find iron, convertible into steel. Copper in the neighbourhood of *Enos*. *Burgas* works the clay found there, and exports valuable pottery.

Round *Byrlat* and through *Moldavia* is found asphalte, rock-salt, saltpetre, and some of the precious metals. The *Wallachian* district furnishes asphalte, copper, some gold, petroleum, sulphur and salt.

Widin provides salt: *Neusatz*, alkali; while round *Buda* and in Hungary is found copper largely, alum, arsenic, antimony, coal, cobalt, cinnabar, gold, iron, lead, nitre, mica, mercury, potash, porphyry, rock-salt, soda, syenite, sandstone, silver, sulphur, tin and zinc.

There are famous opal mines near *Eperies*.

Saltzburg is famous for its salt mines.

Through *Servia* is wrought argentiferous lead, coal, copper, granite, galena, iron, lead, porphyry and zinc. *Oedenburg* has large supplies of coal, also iron and sulphur. *Pesth* finds building-stone and marble.

Kladova yields silver and copper; and round *Temesvar* and *Krassowa* copper, iron, lead and silver.

Styria (E. Hungary) is the centre of the iron trade.

Agriculture, etc.—This vast area is fruitful in all cereals, throughout *Bulgaria* are barley, maize, rice, skins, wool, wood, and wheat, with supplies of honey and bees' wax.

From *Bosnia* come supplies of barley, cattle, flax, hemp, haricot, maize, oats, potatoes, tobacco and wheat, with a famous cheese like Gruyère: a supply also of linen-cloth, earthenware and fruits.

Russia leather work from *Sarajevo* (Bosna-Serai) and *Visoka: Buda* gives her well-known wines: *Debreczin*, cattle, cheese, flax, horses, horse-hair, hides, honey, leather, oils, potash, soda, tobacco and wool.

Throughout *Bihar* cereals, wine, and an abundance of fish: *Hermanstadt* sends down cattle, combs, gunpowder, hats, honey, leather, pipes, woollen and linen cloths and wax.

Bucharest produces butter, cattle, cereals, honey, tallow, wax, and wool; while *Arad* supplies cattle, cereals, fruits, wood, and wine.

Ibrail, with its granaries, is a vast emporium; as also *Galatz*, exporting cereals, beef, hides, salt, tallow, wood, wool, wine, and the general produce of the Black Sea trade.

Ismail sends corn, hides, leather manufactures, tallow, and wool.

Around *Adrianople* we obtain flax and silk, otto of roses and other essences, Adrianople or Turkey red dye made from madder, skins, tobacco, valonia and wax, also an excellent sheep's wool.

Enos exports from its district, cotton, leather, silk, saffron, and wool; *Gallipoli*, corn, oil, and wine, with Russia leather manufactures.

Constantinople sends Brusa silk, bones, carpets, gall, goats' hair, hides, good leather work, linseed, madder, potash and valonia; *Burgas*, butter, cheese, grain, woollen stuffs, and wine; *Rodosto*, corn and wine.

Sophia supplies cattle, cereals, flax, rice, tobacco, wine, and wood; and works silks, leather, and woollens.

Through *Moldavia* we find barley, maize, millet, and wheat, with cattle, tobacco, tallow, wood, and wine.

Wallachia is fruitful in barley, cattle, flax, maize, tobacco, and wheat.

Kilia is a depôt, and sends out grain, hides, wax, wool, wine, and tallow.

Silistria and *Widin* corn, cattle, wine, wood, and wool.

Hungary produces the famous Tokay wine, beetroot, cotton, cereals, potatoes, silk, tobacco, woad, and dye-stuffs. *Szegedin* gives cotton, corn, cattle, soap, salt, tobacco, wool, and wood.

Rye is the *chief* crop of this part of the Austrian empire, then oats, afterwards barley and wheat.

Servia supplies cereals, cotton, flax, hemp, maize, rice, timber, and tobacco, with a specialty, "prunes." Agriculture is primitive; the district produces much live stock.

Salonica exports corn, cotton, timber, tobacco, and wool; and *Seres* corn, cotton, fruit, and tobacco.

Vienna, the emporium and first manufacturing city in the empire, is famous for its cotton goods, cutlery, and ironware, lager beer, shawls, silk, tobacco, &c.

Oedenburg has a trade in corn, cutlery, honey, potash, refined sugar, tobacco, and wax; also, largely, in cattle. *Raab*, in cereals, flax, fruits, silk, and wine.

Pesth raises beetroot sugar, cereals, cattle, tobacco, wool, and wood.

While *Szolnok*, *Klausenburg*, *Shumla*, and *Reni* supply cereals, cattle, fruit, and wood; *Varna* deals largely in eggs, poultry, and grain. *Rasgrad* is famed for its wine, and *Maros-Vasarhely* for a much-appreciated tobacco.

Beetroot sugar is a great industry of *Hungary*. *Brunn* is famous for woollens, *Bohemia* for glass, *Reichenberg* for woollens and cottons, *Vienna* and *Pilsen* for lager beer, and *Trautenau* for linens; while *Temesvar* yields flax, fruit, hemp, maize, rice, silk, tobacco, and wheat. *Turkey* as a whole is fertile, but has made little agricultural progress. It has extensive woods, engages largely in sheep and cattle rearing, and produces barley, cotton, fruits, millet, maize, rice, sesame, and other oil-seeds.

English goods find their way either overland by the mail routes, *viâ* Constantinople, or by the Danube through Galatz.

A very large business is done in English coal at Constantinople; and a considerable quantity is also shipped to Galatz and Ibrail.

Transit.—There is a regular service between England and the Danube during the season, and also with Constantinople.

The mail route to Vienna is *viâ* Paris in 44 hours, being 1132 miles.

From Vienna to Pesth is 171 miles; Szegedin, 289; Basiasch, 435; Serajevo, 508; Temesvar, 359; Bucharest, 716; Galatz, 883; and Braila, 859 miles.

From Varna to Constantinople, by sea, is about 165 miles.

Constantinople to Adrianople, 197; Yamboli, 270; Tatar Bazarjik, 290; and Dedeagatch, 200 miles.

Salonica to Mitrovitza, 198 miles.

By sea, London to Constantinople 3040, and Sulina, 3340 miles.

The Danube freezes and navigation ceases during the winter.

During the whole time that the Danube, Nicolaieff, and the Sea of Azov are open, cargoes of the above commodities are obtainable, the *average* seasons are, in the Sea of Azov, opening first week in April, closing end of November; Nicolaieff, opening middle of March, closing middle of

December; Danube, early in February, and closing end of December.

Centres.—Odessa is the centre of the "Black Sea trade," and Galatz of the Danube.

Odessa, with its rail and waterway facilities, has an immense command of produce, it is the South Russian granary, and with its fine deep harbour is the principal seat of trade. There are few manufactures, but its *transit* business is enormous; besides its "over-sea," it has a large "coasting" trade with Constantinople, the Danube, and further Black Sea ports. Odessa is the largest emporium of Area 1.

Galatz, again, the first important town reached on sailing up the Danube, is an extensive emporium; it has innumerable grain warehouses, stocked with the produce of the surrounding principalities. The situation of the port is unrivalled. It is the chief medium of trade between central Europe and Constantinople.

Not only is it a vast granary, but as an entrepôt for English goods, and all products, does an enormous business, and ranks second to none in this trade.

The majority of steamers load *here*. Galatz has no local manufactures of importance.

CHINA TRADE.

Area 1.

The map areas of the China trade embrace the Chinese Empire, Corea, Mongolia, Anam, Cochin China, and Tonquin.

The commercial resources of China, both natural and industrial, are unexcelled by any state on the face of the globe. The internal trade long since reached a vast magnitude. Their external development has, hitherto, been thwarted by the jealous exclusiveness of the Chinese race. Overland trade, through India and Central Asia, has existed, to a considerable extent, from time immemorial, as also a coasting trade confined to home limits. Maritime commerce, proper, is altogether modern; an innovation unsought, and forced upon them by agencies from without. British enterprise, not without repeated conflict, has, more than any other circumstance, opened up China, and brought the empire into the community of civilised states.

Notwithstanding the steady growth of the China trade, it has been throughout of a *passive* nature, conducted by foreigners, chiefly British, and to the present, continues to bear hardly any relation to the internal commercial activity, or to the capabilities of the country.

Great events have occurred to rouse the Chinese. Admirably placed between the Old and the New World, with numerous sheltered ports along hundreds of miles of seaboard, China was affected by every new facility of access to her borders devised by the constructive genius of East or West. Railway and telegraphic communication, interoceanic steamers, have all tended to rapid and permanent correspondence with the empire, and to place China in direct touch with remote commercial states.

Now, not only are Chinese ambassadors accredited to the "barbarian" governments, and youths of high rank despatched to Europe and America, to acquire a knowledge of the manners and customs of such outer civilisations, but the plodding race now swarm in myriads in every newly-settled state where money is to be made.

The future of the empire does not admit of a forecast, further than, as a matchless field of enterprise, it need not fear any rival in a career of commercial wealth and prosperity.

Our comparatively limited trade with China is observed in the fact, that to send out large steamers to load in the Chinese ports means, practically, to load also in Japan, and possibly to complete at one of the East India islands, since the whole resources of China rarely suffice for a full cargo at one port.

Within the last few years Japan has reversed the precedent of *its* history, by opening its ports to foreign trade, in its desire to share and profit by European civilisation and intelligence.

Facilities of communication have been developed in a marvellous manner within the present age. The old sole route to China, *viâ* the Cape, has been as effectually diverted to the Suez Canal passage as the overland route to India, of the Middle Ages, was diverted by the passage round the Cape.

Alternative routes are also available to and fro. The first of these from China, *viâ* San Francisco, by rail across the States; and the second *viâ* Vancouver's Island, by rail across the Dominion of Canada, are soon, possibly, to be supplemented by the Panama Canal. The curtailment of distance and time, although necessitating transhipment of cargo, both on the Atlantic and Pacific borders, competes advantageously with the long westward ocean passage.

Chinese trade goods are, alum, anise-seed, bean-cakes and oil, cotton, copper, camphor and camphor-wood, cassia, castor-oil plant, coral, coal, charcoal, earthenware, felt, furs and hides, fans, fungus, gold, gold-leaf, gypsum, ground-nut oil, grass-cloth, hats, hemp, indigo, ivory work, jute, lignia, lotus seeds, musk, matting, nankeens, oranges, oil, pearls, preserves, paper, porcelain, pease, rhubarb, rice, sugar, salt, silver, silk, sugar-candy, safflower, spices, tea, treasure, tortoise-shell, tobacco, timber, tallow, varnish, vermicelli, vermillion, wheat, wax, and medicines.

Communications, etc.—China, as yet, only contemplates railway enterprise. Hitherto the vast interior traffic has had to depend upon road, river, or canal, for transport. No country has a more perfect system of water communication.

The rivers are the *Pe Kiang* and branches, with its mouth at Canton. The *Yang-tse-Kiang* at Nankin. The Grand Canal between Lintsin and Shanghai. The *Hoiaiho*; the *Ho-ang-ho*, and several smaller rivers. It is stated that sanction has just been given (March 1887) for the construction of a railway from Lotai to Takli and Tientsin, the work to be done by Chinese labour; and it is hoped this new departure will be the forerunner of a general adoption of railways in China.

Ports.—The only ports in China open yet to foreign trade are Canton, Swatow, Kien-chien (in the island of Hainan), Foo-chow, Amoy; Taiwan, Takao, Tamsui, Kelung (all four in Formosa), Ning-po, Shanghai, Chin-Kiang (Nankin), Kiu-Kiang, Hankow, Tangchow (Cheefoo), Tientsin, New Chwang, (Yingtsze), Wan-chu-fu, and Hong-Kong.

In the China trade are also included the ports of Saigon and Hai-phong.

Towns.—Although China teems with large towns, they do not claim commercial mention, there being no outer trade communication.

Minerals.—China possesses every known mineral except platinum, but of little commercial value to the world at large. It is said to have the vastest resources of undeveloped coal.

Anam is rich in metals and coal, but all undeveloped.

Agriculture, etc.—Hong-Kong is an emporium, a free port and British possession, exporting amber, betel, cotton, China-root, flour, gamboge, galangal, ivory, opium, pepper, rice, sugar, salt, silk, sandal-wood, sweetmeats, tea, turmeric, &c.

Anam has excellent timber forests; and yields cotton, rice, sugar, and spices, but the trade is in Chinese hands.

Cochin-China, a great rice country, very fertile, but unhealthy to Europeans.

Saigon is one of the great rice-ports.

Tonquin ; the soil of this province is very fertile owing to the heavy alluvial deposit brought down by the rivers. Rice is the staple crop; on the higher ground, maize, the sugar-cane, and castor-oil plants, with occasionally china-cassia—a species of cinnamon—are the principal products. Among other commodities may be named oil essences, inlaid work, and silk embroideries. Much of the internal produce finds an outlet through China and Hong-Kong; but the port of Haiphong, situated on the Delta, exhibits a slowly increasing trade, and passes through its hands cotton, hides, pepper, rice, and other Eastern produce.

The China staples are cotton, opium, silk, silk stuffs, sugar, and tea.

The town of Kin-te-Ching is said to have the largest porcelain works in the world.

The abundance of fruit-trees must be noticed, and especially the mulberry for silkworm rearing.

English Goods are introduced through Hong-Kong, Canton, and Shanghai; to the first and last named ports a considerable quantity of English coal is shipped.

Transit.—London to Hong-Kong by sea is 9780 miles; Amoy, 10,015; and Shanghai, 10,540 miles.

China boxes as shipped generally contain handkerchiefs, sarsenet, satin, Nanking crape, Canton crape, shawls, pieces dresses, pieces lutestring; palm-leaf fans, fire-crackers, preserves, blue nankeen, or sewing silk.

Area 2.

Corea is a district surrounded on three sides by the sea, but does not seem very prolific. A mountain range occupies so much of the country that there is but little space for agricultural pursuits. The produce of the soil consists of barley in the north; cotton, hemp, millet, rice, tobacco, wheat, and ginseng root in the more southern districts. Varnish is also largely yielded.

Corea is fairly rich in minerals, possessing coal, gold, iron, and lead; also has manufactures of grass-cloth, hemp, pottery, porcelain, paper, silk tissues, and white cowhides.

Corean arms and sabres are much esteemed.

The only towns approaching importance are Han-yang, situated on a small river, and Seoul, the capital.

Centres.—Englishmen look upon their possession of the island of *Hong-Kong* as the centre of this trade, and, situated as it is at the mouth of the Canton River and opposite Macao, it does an enormous *transit* trade; but it is only an emporium, having no resources in itself. The chief business is "agency,"—in other words, "branch" houses of trading merchants.

The real centres of the China trade are Shanghai and Canton.

Close to *Canton* are large cloth and silk works, the products of which, together with the valuable produce of the divisions round, come through Canton; and with its enormous inland and coasting traffic, constitute this city a very important entrepôt. Steam and sailing vessels usually load at Whampoa, a few miles down the river.

The *chief* activity of this trade centres at *Shanghai*, which receives from all sides immense supplies of produce and a large import of British textiles, &c., and has in itself manufactures of glass, lacquer ware, paper, silk, &c. The preparation of goods (tea, silk, &c.) is a very great industry.

The artificers of all these cities are noted for their artistic skill in carving, inlaying, &c., of which we see specimens in fans, ivory ornaments, articles of virtu, and so on.

CAPE TRADE.

The "natural division" of this trade area embraces the whole of South Africa, south of an imaginary line drawn across the continent at 22° S. lat., taking in the Cape of Good Hope or Cape Colony on to Delagoa Bay.

The characteristic exports are wool, and diamonds; besides ivory, ostrich feathers, and produce, as below.

The gold and diamond fields have recently brought the Cape into more prominent notice, and now there are several large new towns peopled by miners, farmers, commercial and military men.

The demands of our colonists—as they have no manufactures of their own—enable several steamers, mail and cargo, to leave England fully laden for Cape Town and other South-African ports during each month. Turbulence in the uplands with the Zulus and others, compels us to keep a military station at "the Cape," which we supply with English commodities.

The country is mountainous, comprising table-lands and mountain ranges.

Generally speaking, the east and south are well watered and very productive. Although there are many rivers, or rather streams, none of them rise to commercial importance.

The agricultural life of the settlers—more especially the sheep-rearing industry—is bringing this colony into keen competition with Australia and South America for its *wool* export.

Cattle and sheep are the mainstays of the Cape, and rival, in number, any agricultural country.

Railways, etc.—Few and comparatively short. A line runs from Cape Town to Kimberley, about 600 miles, through Worcester and Tulbagh, with a branch to Malmesbury, and also to a point close to Simon's Bay.

Another from Port Elizabeth (Algoa Bay), to Colesberg, 230 miles, with a branch to Grahamstown; also to Graafreinet from Port Elizabeth, about 140 miles.

Again, East London to Alwal-North; and Port Natal to Ladysmith.

All these lines run *inland*, so the farm producers, for some miles on either side of the line, have an easy transit for their goods; but the rest are dependent on the roads and the slow progression of the bullock-carts.

Merchants at the sea-ports send traders' waggons into the interior, which return laden with produce.

Ports.—Port Nolloth, Cape Town, Simon's Bay, Port Beaufort, Mossel Bay, Port Elizabeth, Algoa Bay, Port Alfred, East London, Port Natal, Port Durnford, and Delagoa Bay.

Towns.—Clanwilliam, Zwellendam, George, Buitenhage, Somerset, Burgherdorp, Colesberg, Bloemfontein, Hopetown, Barkly, Utrecht, Pretoria, Lydenburg, and Ulundi.

Minerals.—There are many rich fields of minerals; copper, gold, iron, and manganese, not, as yet, effectively worked; copper is mined and shipped from Port Nolloth, and one or two other ports.

The most valuable exports are diamonds, shipped chiefly at Cape Town; the best known fields are in the Kimberley district.

Coal and lime are said to exist near Port Natal. There are also in the north extensive coalfields, with ironstone of excellent quality near. Guano is obtained from the island of Ichabö. Copper, cobalt, coal, iron, and lead are found in the Transvaal.

Agriculture, etc.—Cereals are but little cultivated for export. In favoured districts there are grown barley, oats, rye, wheat, and maize. The chief exports from most ports are aloes, argol, elephants' teeth and tusks, hides, horns, hair, ivory, ostrich feathers, a little cotton, some whale and seal oilskins, wool (Mohair, Merino, sheep and goat); and timber from Algoa Bay, this latter mainly by sailing vessels.

Arrowroot, beans, cotton, ginger, gums (Euphorbia, &c.), indigo, maize, pepper, pineapples, rice, sugar, and tobacco, with the staple and other produce abound, and are shipped at the N.W. ports. There are many indigenous and useful drugs available for export.

The "Cape wine" is not now a commercial commodity, except from and around Constantia. Other available produce consists of coffee, fruits, and vegetable wax. Cape leather is also well known. Silk culture is likely to become a very important element in commerce.

The fisheries are very important. The tea-plant has been introduced and thrives, evincing a prospect of becoming an important industry.

Ivory is the principal Transvaal trade. Maize is now grown so extensively in *Natal* as to admit of a prospect of export.

English Goods.—Coal to Cape Town. English manufactures of all kinds, textiles, hardware, &c., to all ports.

Transit.—By mail steamer; London to Cape Town, 6065 miles.

Centre.—Cape Town is the central point of the trade; and is the port where all mail steamers call. It enjoys chiefly a *transit* business, receiving all British commodities and returning the produce of the country.

Cape Colony cannot be said to have any manufactures, although Cape Town does a little leather work and has a few flour mills; it is also the centre of the wine trade of Constantia, which little town is only 9 miles from this city.

The main characteristics of Cape Town are, its aspect as a military town and its being an emporium for goods.

The United Kingdom supplies all manufactured commodities.

The harbour accommodation is excellent.

COLONIAL TRADE.

Area 1.

The geographical areas consist of Australia, comprising West, North, and South Australia, Victoria, Queensland, and New South Wales, with Tasmania and New Zealand.

The staples of Australian trade are wool, hides, skins, tallow, frozen and tinned meats, and wheat.

The vast resources of our Australian colonies have been proved by their rapid expansion of recent years. Before the discovery of gold, in 1851, the trade consisted of a few sailing vessels, taking one voyage a year *viâ* the Cape, and generally returning by Cape Horn; so timed as to load their cargoes of wool—the staple of the trade—in about the month of October, and sail to reach London for what was known as "the February wool sales." During this month, vessels, one after another, kept making the land in the English Channel, and then remained idle until time to load again in June or July for the repetition round.

Since the completion of the Suez Canal, magnificent steamers, carrying the mails *weekly*, and even oftener, leave England for the great ports in South Australia, Victoria, New South Wales, and New Zealand.

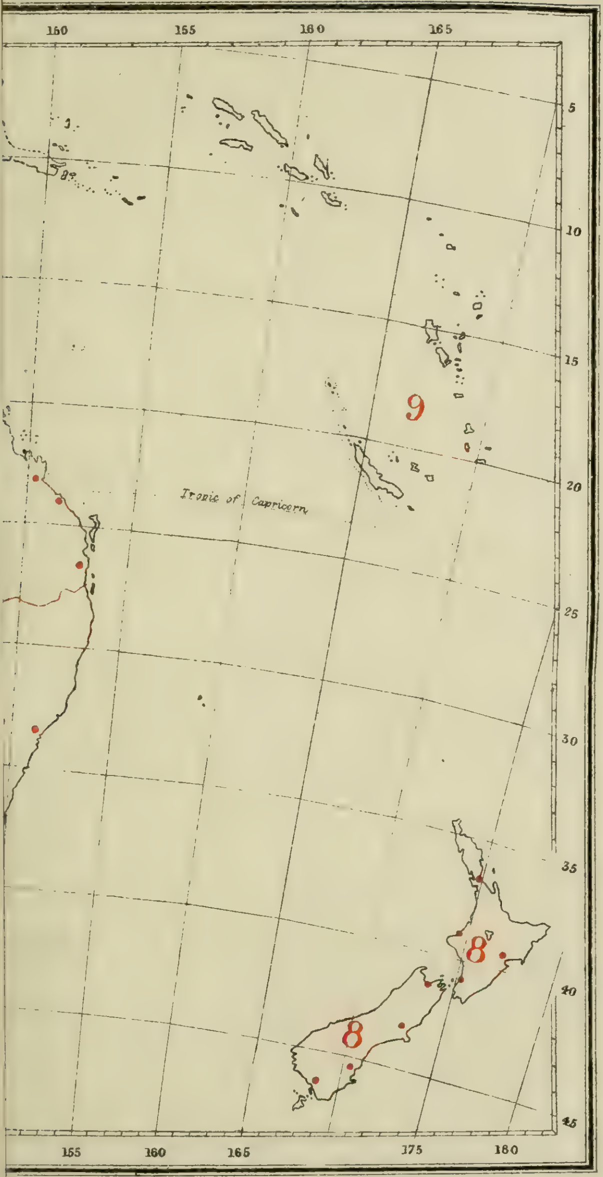
The immense tracts of land and the good climate afford ample opportunity for sheep-rearing and wheat-growing.

The colonies in former years shipped almost exclusively *wool*, with a few cargoes of wheat in the off season.

Now the shipments consist of produce in great abundance, variety, and value, both from the animal, vegetable, and mineral kingdoms.

A great impetus to cattle rearing has been given by recent

NS OF TRADE.



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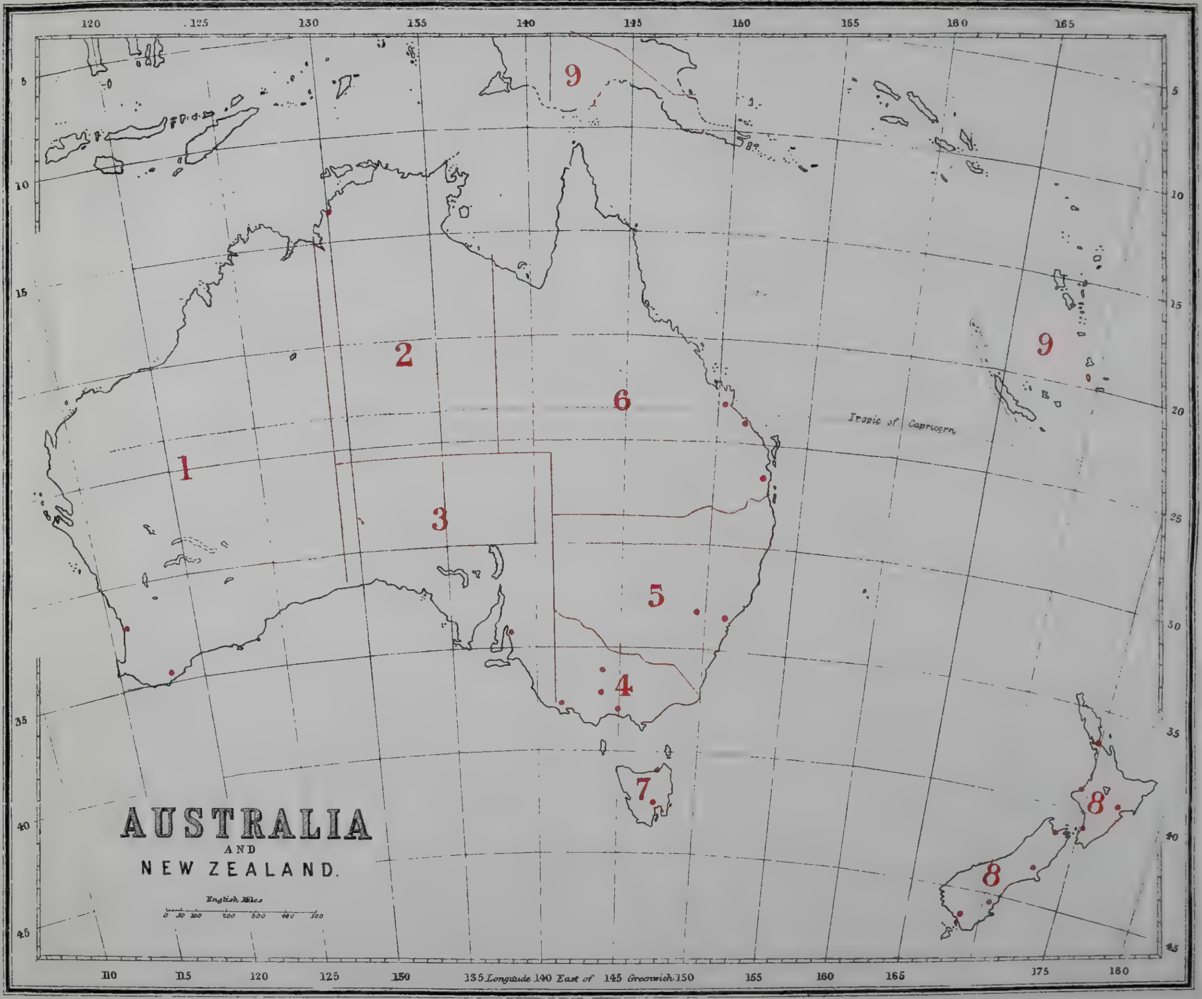
THE NATURAL DIVISIONS OF TRADE.

REFERENCE TO NUMBERS.

No. 1. West Australia Trade.
,, 2. North ,, ,,
,, 3. South ,, ,,
,, 4. Victoria ,,
,, 5. New South Wales ,,
,, 6. Queensland ,,
,, 7. Tasmania ,,
,, 8. New Zealand ,,
,, 9. Island ,,



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successful methods of preserving the flesh in a fresh state, either as "tinned meats," or in the frozen carcass, conveyed to England in vessels specially fitted with cold chambers for the purpose.

In the days of the sailing ships, when they loaded entirely with wool, it was the endeavour of the shipowner to get a "ballasting" of some heavy goods that took up little room: hogsheads of tallow were too bulky; wheat again was to be avoided, even if obtainable. A few hundred tons of copper best answered the purpose, and the owners of this valuable mineral took advantage of the chance to deliver the metal in London at the low rate of one shilling per ton.

The progress of trade has been, first Victoria, then New South Wales and New Zealand, then South Australia. Queensland and Western Australia were only occasionally touched. North Australia was unknown.

The necessity for new fields of enterprise and trade has drawn settlers to these parts, with the result that *steamers* now run to Western Australia and Queensland, trade is opening up in the north, and there is a talk of a railway from the north, through Australia to Adelaide, Melbourne, and Sydney.

Railways, etc.—Railway enterprise has made greater progress in New South Wales and Victoria than elsewhere; Queensland, from its proximity to these colonies, sharing next in the advantage of this species of communication.

There are only a few short lines in South Australia, while in the north and west settlements railways are, as yet, barely projected.

Compared with its facilities for railway communication, New Zealand is in advance of the Australian Colonies.

Victoria has lines running inland and coastwise, from Melbourne the capital, and communicates directly with Sydney; a projected line to Newcastle (N.S.W.), and lines run from Sydney far inland, also towards Queensland, with lines under construction to Brisbane, and thence inland.

New Zealand in the North Island connects the ports Wellington, Napier and Waimate, through the inland country. Lines connect in the North, Auckland, Waikato, and Tedwamutu. The South Island has a fine coast line from Christchurch to Dunedin and Invercargill, with short *country* lines at the ports.

New Zealand is mountainous, and there are many streams, which add to the agricultural facilities of the islands.

Australia has some fine rivers, the Murray, with a course of about 1250 miles, traversing nearly the whole boundary between New South Wales and Victoria, with tributaries running right into the heart of and through New South Wales, and then watering a part of South Australia, entering the sea in the Gulf of St. Vincent. This river is navigable for a considerable portion of its course.

Swan river in Western Australia, about 190 miles long; and very many smaller streams.

Ports.—In the North, Port Darwin, Palmerston, and Normanton.

In Western Australia, Port Grey, Perth, Peel, Freemantle, and King George's Sound.

In South Australia, Port Augusta, Wallaroo, Port Wakefield, Adelaide, and Kingston, (Lacepede Bay).

In Victoria, Portland, Melbourne, (Geelong, and Port Phillip), Palmerston, and several minor ports.

In New South Wales, Kiama, Botany Bay, Sydney, (Port Jackson), Newcastle, (Port Hunter), Port Stephens, and Port Macquarie.

In Queensland, Brisbane, Maryborough, Bundaberg, Port Curtis, Gladstone, Rockhampton, Mackay, Port Denison, Townsville, and Cardwell, (Rockingham Bay).

In New Zealand, North Island, Hokianga, Kaipara, Auckland, Waikato, New Plymouth, Waimate, Wanganui, Wellington, Napier, Gisborne, Tauranga, Howick, Omaha, Whangarei, Kerikeri, and many small ones.

While in South Island, Pictou, Nelson, Havelock, Blenheim, Kaiapoi, Christchurch, Lyttleton, Timaru, Oamaru, Hawkesbury, Otago, (Port Chalmers), Dunedin, Invercargill, Hokitika, Greymouth, Westport, (Tauranga), and others.

Tasmania has George Town, Launceston, and Hobart Town. So it will be seen that New Zealand and Queensland have the best port facility of all the districts, or rather that the ports are better known.

Towns.—In the North, none off the sea-coast. In *West Australia*, none except York, near Perth. In *South Australia*, confined to the coast. In Victoria, New South Wales, and Queensland, towns are springing up on the railway lines; as also in New Zealand, where there are a few inland towns on the rivers.

Minerals.—North Australia : The Rev. Tenison-Woods says of this district, "I do not believe that the same quantity of minerals, veins of gold, silver, tin, copper and lead, will be found in any other part of Australia." At present all the resources are unworked.

Gold in New South Wales and Victoria, adding much to the prosperity of these colonies; and in the former the well-known coal-fields of Newcastle, which both supply the colonies and also send their yield in large quantities to Chinese waters. The copper mines of Wallaroo and Burra-Burra (S.A.), are very rich. South Australia is the copper region, *par excellence*, of Australasia. Fine statuary and ornamental marble is quarried in New South Wales.

Lead and tin abound throughout Australia, as also granite, limestone, potter's clay, slate, sandstone, and sand admirable for glass-making.

South Australia has also argentiferous lead, iron, manganese, quicksilver, tetanium, and zinc; just a little gold, but copper is the chief wealth. Slate also is quarried, and a few precious stones found. Clay is also worked.

West Australia produces antimony, coal, copper, cinnabar, some gold, iron, lead and plumbago. A *great* mineral opening exists in this colony.

New South Wales.—Bathurst is the centre of extensive gold fields. New South Wales is profusely rich in minerals, with coal, copper, and iron mines,—the latter have yet to be developed,—valuable gold fields, antimony, asbestos, bismuth, cinnabar, kerosene shale, lead, silver, and tin, with valuable diamonds, rubies, opals, and other stones. Petroleum has also been found.

Queensland possesses undeveloped coal and gold-fields, antimony, copper, galena, lead and quicksilver; pearls and tortoise-shells are also found.

Victoria presents vast mineral resources yet to be worked. At present the only workings on a large scale are gold, antimony, granite, iron, and stone with some clay, copper, and coal.

Tasmania affords evidence of large stores of copper, gold, iron, lead, manganese, silver, tin and zinc. It has also good coal beds, while sandstone and limestone for building purposes abound. Considerable portions of the iron ore is highly magnetic.

New Zealand does not seem so rich in minerals, although coal is widely distributed, and can be worked without sinking,—in the mountain side. Copper is also advantageously worked; together with alum, antimony, arsenic, bismuth, iron, nickel, silver, gold and tin. Sulphur abounds. Mining industry is making rapid strides, especially in coal.

Agriculture, etc.—The whole population, except those commercially engaged in the sea-ports, are agriculturists or miners, hence the paucity of *towns* and multiplicity of villages. The different districts depend upon the mother country for all manufactures, working implements, and machinery.

Wool is the staple produce, then we have the heavy export of frozen carcasses and tinned meats. Excellent wheat is grown in *South Australia*, and is exported, as well as maize. Potatoes are largely grown, also flax and hops. The colony is very fertile, fruits grow anywhere, and very excellent olive oil is obtained.

South Australia is the granary of Australia. Sericulture is likely to become important.

Merino sheep are largely reared. All cereals grow well. Hides and skins form a large trade. The wine trade is largely increasing in this and throughout the other Australian colonies. Very fine flour is made and exported, also tallow largely; with bark, gum, honey, and wine. Tobacco is successfully cultivated.

West Australia exports its staple *wool*, wheat, and barley.

Sandal-wood forms a large item of export, especially with China and Singapore. The country is heavily wooded, and furnishes excellent shipbuilding timber.

Cattle, horses, pearls, pearl-shells, and wine are also exported. Fruits and olives grow well.

Victoria.—Its staple production is wool, which, with flour, biscuits, and wine, is largely exported.

Wheat and oats are the chief crops, together with a large growth of malting barley.

Cattle rearing is largely carried on. This colony is, at present, the most enterprising, and will doubtless develop into a manufacturing district. Its merino wool is of fine quality. Potatoes are very extensively grown; also apples and other fruits.

New South Wales.—In this region, as in Victoria, the mulberry tree flourishes, and furnishes food for a fine variety of the silkworm, whose cocoons, both in size and quality, have reached England, and raised hopes of a new source, excelling the old, for the supply of silk, and beyond the reach of the infection which has so fatally injured the silk-rearing industry.

Rich and juicy fruits of every kind abound with the mulberry, and through our improved means of transit, afford us promise of a large trade in fruit, both preserved and fresh. Oranges may be called the *staple* fruit.

At present sheep-farming is the staple; with a production of wheat and other cereals, but, except maize, insufficient for export.

Wine is an increasing trade. The other exports consist of carcasses, preserved meats, hides, skins, tallow, arrowroot, fruit, indigo, some silk, sugar and tobacco. Cotton may be cultivated with success, and it is stated that the tea-plant might be advantageously grown.

Queensland.—Independently of its precious stones and metals, Queensland is well timbered, and has excellent pasturage, with every advantage for the introduction and growth of jute, and other fibre plants. The colony produces in rich abundance wheat, oats, barley and maize; cotton, coffee, all and every fruit; sugar, with rum; gums; wool, live stock, hides, skins, and tallow; dairy produce; arrowroot, sago, tapioca, rice; timber, tobacco, and bêche-de-mer. Among others, cotton might become a staple commodity.

New Zealand exports its staple wool, together with flax, kauri gum, oil, hides, skins, carcasses, tallow, shipbuilding wood, soaps, &c. Apples, pears, and quince may be termed the characteristic fruits. Very excellent flax, also cereals and root crops, can be raised.

Tasmania.—This colony has excellent live-stock and fine timber, also grows a first-class wheat.

The Eucalyptus tree, a "multum in parvo," grows here, and, besides timber largely, the island exports bark, flour, fruits, oil, oats, wheat, and wool. Gum and resin trees, muskwood, myrtle, &c., abound.

English goods.—At present the manufactures are next to nothing; the steam and sailing vessels take out, to *all* districts in this area, every English commodity: textiles, machinery, earthenware, crockery, and manufactures, in exchange for specie, wool, and produce.

Transit.—By mail steamer *viâ* the Suez Canal; London to Adelaide being 8745 miles; Melbourne, 11,250; Sydney, 10,840; Hobart Town, 11,280; Auckland, 12,120; and Wellington, 11,870 miles.

When the Canadian Pacific route *viâ* Vancouver's Island is the recognised way, the time of transit will be very materially abridged.

Centres.—There is no general centre to this branch of trade, each division of Australasia carrying with it its own particular centre; thus Victoria means Melbourne; New South Wales, Sydney; Queensland, Brisbane, and so on.

The general idea conveyed by being engaged in the "Australian" trade means, shipping to and from Adelaide, Melbourne, and Sydney.

The same with Tasmania and New-Zealand—the former means Hobart Town, and the latter Auckland, Wellington, or Lyttleton.

The Australian ports have no manufactures of their own, but they are very important *transit* centres. Except for special shipments of a particular cargo from an outport, all the produce of these colonies passes through these centres.

Adelaide has flour mills, and there are shipbuilding facilities at all ports. New Zealand has flour and saw mills, with some rope walks. The Colonies depend upon British manufactures for all they require.

CANADIAN TRADE.

The geographical division of this trade embraces all the territory known as British North America, and distinguished by the several districts or provinces of Nova Scotia, New Brunswick, Canada, Hudson's Bay Territory, Manitoba, North-West Territory, British Columbia, &c., and covering the whole ground traversed by the Canadian Pacific Railway, from the Atlantic seaboard to Vancouver.

The commercial aspect and bearing of this trade are discussed in conjunction with and under the general style of "The American Trade," or "States Trade," see p. 300, *et seq.*

GENERAL TRADE.

The geographical division of this trade embraces an extensive seaboard and several nationalities; the coast line is easily definable, extending from Gibraltar to Hamburg, commercially known as the "home limits." But to understand the natural division *inland*, recourse must be made to areas with imaginary boundary lines; and for this purpose, and to clearly define, we must divide the General Trade into four map areas:—1. Comprising all Portugal, with the Spanish seaboard from Gibraltar to Bayonne, bounded inland by an imaginary line drawn from Gibraltar skirting Seville, Badajos, Palencia, Burgos, Vittoria, to Bayonne. 2. The Biscayan and English Channel sea-coasts, with the imaginary line from Pau in the Pyrenees *viâ* Angoulême, Poitiers, Tours, Orleans, Paris, Laon, Namur to Brussels and Antwerp. 3. Belgium and Holland, including the borders of Germany to Wesel, Crefeld, Dusseldorf, Barmen, Elberfeld, Cologne, and Aix la-Chapelle; and 4. N.W. Germany from a line drawn from Leeuwarden and the Zuyder

Zee to Arnhem and Wesel, thence east to Hamm, Bielefeld, and Horsum, just S. of Brunswick; thence N. through Brunswick, Uelzen, Lauenberg, and Lubeck, thence W. to the sea.

The country to the *east* of these imaginary lines forms what may be styled an "Intermediate Zone," that is, a tract of country whose produce or manufactures finds an outlet for shipping distribution either northward or southward, hence bearing no commercial trade designation. For example, goods to or from this Intermediate Zone if sent *viâ north* ports, help to build up the "General Trade;" but if sent *south*, the Mediterranean trade.

In our review of British commerce with the world at large, the features of our transactions change according to the region of intercourse. We send cargoes to the East and to the Colonies, and bring cargoes home direct.

In the Mediterranean and Black Sea trades the conditions do not favour this simple course. The commercial policy of Russia, and to a great extent of Austria, discourages imports and encourages exports, and by so much interferes with real reciprocity. Further, the European ports of the Mediterranean are so connected by a complete system of railways, that goods are sent by land at once to the Atlantic or northern ports to save a long sea passage.

Our merchants adapt themselves to the circumstances, sending, for example, to Constantinople cargoes of coal, which they discharge, and, without taking in fresh cargo, proceed direct to the Black Sea for the season's trade. Here they become really carriers. The Greek merchants, in whose hands the whole of the trade of the Black Sea ports centres, freight the vessels for the Mediterranean and northern continental ports, comparatively little of the produce reaching England.

Nearer home a further divergence of practice is observed.

Our "general trade" with the northern and Atlantic ports between Hamburg and Bordeaux is not wholly "in and out."

On watching the markets, both English and continental, while a cargo is afloat, it may answer the merchant's purpose to deliver, or take in cargo more than once, at different ports, wherever a profit may be made, returning home in the end with cargo or cash as advised.

But to complete our circle, we must extend our limit beyond Bordeaux to Gibraltar, thus bringing in a very important trade, namely the "ore trade."

There is a very large and increasing general trade, between England and ports in these limits; the "regular" lines taking out and bringing back general cargoes, which include *everything*, whether the raw material, manufactures, or machinery.

A very extensive trade is done in the raw materials of coal from England, with iron or copper ore, in exchange.

Railways, Communications, etc.—Working from Gibraltar, northwards, the whole of this portion of Spain, to the frontiers of Portugal, is well served; the main line of railway from Madrid, through the provinces of Andalusia, New Castile and Estremadura, gives the production of these neighbourhoods fine facility of transit to Seville, and the important seaport town of Cadiz.

This district is also much helped by the river Guadalquiver—navigable to Seville for steamships—with its canal on one side running to the Mediterranean shore; and on the other to the important seaport of Huelva.

Portugal has its railway converging points at the seaports Lisbon and Oporto.

Lisbon connects by direct line, through Portugal, with Spain and Madrid *viâ* Badajos.

Across the water at Lisbon is a line, running to the centre, and thence, branching on the north, through Evora to the main Spanish line, and on the south, through Beja; to the sea-coast at Faro; connecting with the river Guadiana at Beja.

Lisbon has a short line to Cintra and Torres-Vedras; following the Spanish line, by the banks of the Tagus to Santarem, it branches northwards, and runs, not far from the coast, *viâ* Coimbra to Oporto, thence to Vianna, and into Northern Spain to Vigo on the west, and Orense on the east.

From Orense, with a line to Coruña, the railway still runs east through Leon, Palencia, Burgos, Vittoria, for Pampeluna, and across Spain to the Mediterranean, San Sebastian, and enters France at Bayonne.

This line branches at the various places named, on the north to the sea-coast ports of Gijon, Santander, and Bilbao, and on the south to Madrid and Central Spain.

River communication to this point is also excellent, comprising the Guadiana, Tagus, Douro, Nervion, and several smaller streams.

Having now entered France, the rail branches south-east to the Mediterranean at Cette, or continues to Bordeaux and thence to Paris.

Throughout France, the ports are in railway communication direct with each other, with the manufacturing centres all over the empire, with the country, and with Paris the capital.

The principal commercial rivers are the Garonne, Gironde, Loire, and the Seine.

This network of lines gives admirable facility for transit from due east to due west, north to south, and practically each point of the compass to any other.

Belgium, again, reaches all and any part of Europe from its seaports by Antwerp or Brussels.

This country is much favoured by its water-ways.

Holland, along its flat surface, connects all its principal seaport towns, and maintains internal communication by rail, either through Antwerp or Cologne.

It has an immense superiority by its magnificent rivers, the Maas and the Rhine, navigable for many miles.

The Ems, Weser, and Elbe, combined with efficient railway transit in every direction, carry us to our northern limit, Hamburg.

Ports.—In *Spain*, Cadiz, Huelva, and Seville.

Portugal.—Lisbon, Figueira, Oporto, and Vianna. In *North Spain*, Vigo, Carril, Coruña, Aviles, Gijon, Santander, Bilbao, St. Sebastian, and Pasages.

France has Bayonne, Bordeaux, Rochefort, La Rochelle, Sables d'Olonne, Nantes, St. Nazaire, Vannes, L'Orient, Brest, St. Malo, Cherbourg, Caen, Honfleur, Rouen, Havre, Fécamp, Dieppe, Boulogne, Calais, and Dunkirk.

In *Belgium*, Ostend, Nieuport, and Antwerp.

In *Holland*, Flushing, Terneusen, Rotterdam, Amsterdam, Harlingen, and Delfzyl. While *Germany* gives Emden, Brake, Bremen, Bremerhavn, Cuxhaven, Gluckstadt (really in Denmark, but on the north bank of the Elbe), and Hamburg.

Towns.—In such a vast business area, we must confine ourselves to those towns within easy transit reach of the sea-board.

Spain.—Cordova, on the main line.

Portugal. — Leiria, Castello Branco, Guarda, Viseu, Lamego, Braga, and Braganza.

North Spain.—Ponteveira, Lugo, Oviedo, Toro, Valladolid, Salamanca, Avila, and Soria.

France.—Mont-de-Marsan, Roquefort, Perigeux, Angoulême, Cognac, Limoges, Laroche-sur-Yon, Poitiers, Angers, Tours, Moulins, Nevers, Orleans, Rennes, Quimper, St. Brieuc, Laval, Alençon, Evreux, Paris, Amiens, Arras, Lille, and Valenciennes.

Belgium. — Courtrai, Tournay, Mons, Namur, Liege, Louvain, Brussels, Mechlin, Ghent, and Bruges.

Holland. — Dordrecht, The Hague, Leyden, Utrecht, Arnhem, Zwölle, and Groningen.

Germany.—Cologne, Wesel, Munster, Hanover, Essen, Brunswick, Magdeburg, Minden, Göttingen, Cassel, Barmen, Elberfeld, and Berlin.

In this list only the most prominent find a place, and those previously referred to are not repeated.

Minerals.—The ore trade.

The "ore trade," as a commercial designation, applies practically to Bilbao, with its adjacent port of Santander, although there are other ore centres, of which Seville, with the auxiliary port of Huelva, is the chief.

Many British vessels are exclusively engaged in this branch of commerce throughout the year, and immense quantities of ore are carried away in English bottoms.

The minerals of Portugal are not much worked for export, although the resources of the country are considerable, in antimony, bismuth, copper, cobalt, iron, marble, porcelain earth, lithographic stones, slate, saltpetre, &c.

The only mineral extensively produced is salt, of which large cargoes are shipped at St. Ubes (Setubal).

North Spain, besides the iron ore referred to, has cobalt, copper, quicksilver, tin, zinc, and other metals.

The precious metals are only very partially worked.

France does not export any minerals of consequence from her western or northern ports.

Coal and iron in the north-east and Loire districts; St. Etienne may be termed the French Birmingham. There are vast iron works at Le Creuzot: Thiers is the cutlery centre.

Belgium is rich in minerals, possessing coal, iron, lead, manganese, sulphur, and zinc. It also supplies fine marble.

Most of them are used for internal consumption; some also enter France. Liége and Mons are the mining centres: Namur and Charleroi for the hardware trade.

Liége and Hainault are the principal coalfields.

Holland has no economic minerals.

Germany.—The minerals here are used for home consumption, in the great manufacturing centres; comparatively little being exported, though German coal is displacing, in Holland, the produce of English mines. Dusseldorf is the centre of the coal and iron industries.

Agriculture, etc.—For the wines of Portugal and Spain; brandies of Cognac; delicacies of Roquefort and Perigeux; muslins of Moulins; china of Sévres; lace of Valenciennes; cheese of Holland; the vast works at Essen; the delicate manufactures of Barmen-Elberfeld; and the many other peculiarities of places, reference must be made to the "special industry" column, in the appended tabulated list.

Chief Exports from the Principal Forts.

Seville, sherry wines, oranges, fruits, wool, ore, &c.

Cadiz, wine, salt, fruits, oil and minerals.

Lisbon, a port of call for South American mail steamers; fruits, leather, oil, salt, wines, &c.

Oporto, fruit, leather, oil, salt, sumach, wine, &c.

France may be divided agriculturally, thus—

North, barley, oats, rye, wheat; pulse: English orchard fruit: beet-root.

Central, cereals as above, with maize: the vine.

South, maize chiefly, and rye: vine, mulberry, orange, lemon, apricots and similar fruit, pistachio nuts, chestnuts, &c.

Wine culture and the mulberry tree are very extensive industries in every available part of France.

The French business centres are: Lyons, Tours, &c., for silk fabrics; Valenciennes for lace; *Rouen*, the French Manchester, for cotton goods; Rouen, Amiens, Louviers, &c., for woollen goods; Rheims, shawls; St. Quentin, linen goods; Cambrai, cambrics; Grenoble, gloves; Abbeville, carpets; Sevres, glass and porcelain; Paris, articles of virtu; Calais, St. Malo and Caen, for dairy produce; and Avignon, corn market.

Bordeaux, a port of departure for South America: exports pitprops to South Wales; brandy and wines, fruit, some grain, resins, sleepers, turpentine, &c.; also with *Bayonne* ships fir sleepers from the neighbouring Landes, very largely to Algeria, and South Spain.

Charente, brandy.

Rouen, great cotton imports, gypsum, ochre, sugar, &c.

Dieppe, silks, ivory-work, fancy goods, manufactures, wine, brandy, &c.

Havre is a station for Transatlantic and other steam lines.

Dunkirk exports coal coastwise, cereals, flour, vegetables, &c.

Belgium cultivates largely barley, oats, rye, wheat (that of Liége is noted), clover, beet-root and pulse. Flax is the agricultural staple.

Brussels and Mechlin are noted for lace; Ghent, Antwerp, for cotton goods; Verviers and Liége for woollens; Courtrai for damask and linen; Tournay and Brussels for carpets: Liége for straw hats; and Ghent also for refined sugar.

Antwerp, a great business centre, steam and sailing vessels leave here for all parts of the world: it exports *as an emporium.*

Holland is a land of dairy produce and garden bulbs. Leyden and Utrecht are known for their woollen goods, and the latter for silk and velvet fabrics: Haarlem for linens and cottons: Schiedam for "Hollands."

Amsterdam, the great import emporium of sugar and East India produce: there is considerable transit trade. This port exports cheese and dairy produce; clover, madder, seeds, pulse and gin.

Bremen with Brake, is another emporium; ships cattle and sheep largely: also beans, glass, rags, toys, &c.

Hamburg, the chief shipping entrepôt of Germany, exports Nuremberg toys, watches, &c., all textiles, manufactures, dairy produce, grains, wines, &c.

English goods, of all descriptions, are scattered broadcast.

Coals in large quantities from England to Seville, Lisbon, Bayonne, Bilbao, Bordeaux, Rochefort, La Rochelle, Sables d'Olonne, St. Nazaire, St. Malo, Caen, Rouen, Havre, Dieppe, and Hamburg, with many other ports.

Transit chiefly by mail railway route.

Centres.—Cadiz. This city is the great outlet of S.W. Spain; its fine bay gives it unrivalled shipping importance: its position as the centre of the "Sherry wine trade," adds much to its prosperity. It is a naval station, and has productive salt pits, this product being sent to Newfoundland and the Brazils.

Spanish leather, manufactured principally at Seville, comes through Cadiz. The transit trade in fruit and other commodities is very large.

Lisbon is the capital of Portugal and the centre of Portuguese trade, although Oporto, the centre of the *Port wine trade*, runs it very closely. These two ports are connected by rail, and Lisbon reaps much benefit from the vineyards in the provinces touched by this means of communication.

Lisbon is only separated by a few miles of river from Setubal, (St. Ubes), the great salt emporium of Portugal. Lisbon roadstead is one of the finest in the world.

The manufactures, consisting of jewellery, paper, silk, sugar refining, &c., are of little moment, but its *transit* trade, being an outlet by its admirable rail and water facilities for central Portugal and West Spain, is enormous. The fruit trade is very great.

An important item in its shipping industry is the fact that it is a port of call for the South American mail steamers. It absorbs large quantities of English coal and general goods.

Bordeaux, the great Biscayan French port, a most important centre; not only is its import of English coal enormous, but it supports regular lines of English steamers with general merchandise from London, Bristol, South Wales and other ports, and does a very flourishing trade in return cargoes of pitprops to South Wales.

Its export of fir sleepers from the Landes pine forests, thanks to the Abbé Paramelle, is an increasing trade.

Another important point in its shipping is the fact that it ranks as a " loading port" for South America, for French possessions in the East or the Polynesian Islands; English goods going to Bordeaux, and there being transhipped.

The Languedoc canal joins the Bordeaux river (Gironde) with the Mediterranean, and is an important factor in its transit trade.

Bordeaux is the centre of the *Claret trade*, and has a large business in brandy.

Its own manufactures consist of lace, woollens, and other textiles. Shipbuilding is carried on, and it has a share in the Newfoundland fisheries.

Havre, the port of Paris and Rouen, takes an important place in French shipping.

Its import of English coal ranks second to none; a large quantity of "small coal" being sent over for "patent fuel" manufacture. Havre with Rouen rejoices in the almost exclusive French import of cotton from the United States ports. It also ranks as a loading port, and has a fine line of Transatlantic steamers.

It is the outlet for the cotton, linen, woollen, and other manufactures of Seine Inférieure and North France, and does an immense transit business with England by the cross-channel boats in fruit and general goods.

Its import of Baltic wood is very large. It has manufactures of earthenware, oil, rope, ship-chandlery, marine stores, tobacco, some refining, also spinning and weaving.

It is favoured with a fine harbour, and has considerable shipbuilding.

Antwerp, the most important port in the North Sea, has direct and extensive communication with all parts of the world, for which it is admirably adapted as a loading port, being convenient to every field of continental manufacture. It has a large import trade, being the chief emporium for grain, South American wool, hides, Baltic timber, &c.

It is a centre of cotton manufacture, and also provides carpets, lace, silks, and velvets.

It manufactures tapestry; has extensive shipbuilding; is a very important passenger station; has cigar, ship-chandlery, and marine stores work, with sugar refineries. In a word, Antwerp takes a first place as an emporium and transit town.

Amsterdam, the capital of Holland, is the spice and sugar market of North-west Europe, its import of these commodities being very extensive. One of the chief businesses is banking. It has extensive sugar refineries; considerable shipbuilding; manufactures of linen, silks, velvets, work in precious stones, specially renowned, marine stores, gin and tobacco. Its fisheries are productive. The canal and railway facility enjoyed by Amsterdam gives it a large and profitable *transit* trade.

Hamburg.—The most important centre of German export trade. As an emporium it lacks not a single commodity, being the outlet for all German manufactures, and it receives the bulk of the sea-borne merchandise.

The trade of Hamburg is mainly *transit*, but it has some minor manufactures of hats, textiles, tobacco, and does some sugar refining, brewing, distilling, dyeing and weaving.

It absorbs a large quantity of English "north country" coal.

INDIAN TRADE.

British trade with India covers Hindostan and Burmah, which last territory, by the recent annexation of King Theebaw's dominions, has been doubled in extent. Geographically, too, it includes S. Thibet, E. Afghanistan, Beloochistan, Cashmere, and Nepaul; we have also reverted to Cambodia and Bangkok. On the occupation of Burmah the trade routes were somewhat demoralised, but, gradually assuming their usual aspect, trade began to move, and the first caravans since the occupation brought to Mandalay 500 pony loads from China and 1000 bullock loads of tea from Theebaw.*

Although India is still undeveloped, and the "wealth of the Indies" a mere figure of speech, when spread over its myriads of dusky races, yet its resources, in the aggregate, are of such magnitude, that the possession of the commerce of India, from the days before the Phœnicians to those of Victoria, its reigning Empress, has ever made its owners for the time being the wealthiest in the world.

The development of India has been more rapid of late, a fact exemplified in the average rate of wages having quadrupled within a generation; equivalent to a corresponding growth in the extent of the capital of the empire.

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* *Homeward Mail.*

India teems with natural resources.* Its backward condition is due mainly to the caste-institutions of the people and the deficiency of industrial enterprise. Though nearly the oldest centre of civilisation, the whole region may be regarded as only starting on its career in the arts of production by machinery.

Vivified by the light and heat of a tropical sun, irrigated by fine rivers, and varied by plateaux and mountain heights, the forms of life, both animal and vegetable, are infinite in variety and reach their intensest phase of exuberance. Cereals, fruits, spices, fibres, perfumes, dyes, drugs, extracts, and forest woods, are nowhere surpassed in profusion or perfection. India is the chief centre whence have wandered most of the cultivated plants and domesticated animals ministering to the wants of mankind. Its mineral treasures are equally varied, metalliferous and non-metalliferous, ranging through every geological formation from the coal, and even lower iron-stone beds to the diamonds so well known by the world-famed name of Golconda, and the economic resources of the latest or Cainozoic period.

Upon this noble heritage England has entered; and with the authority of owner of the soil and ruler of the empire, she assumes the responsibility of utilising the grandest resources ever given to man to administer, for the well-being of the people and the good of the world.

As aforetime, our great dependency must continue to be a highway and entrepôt for Chinese produce. Railway transit has already given an industrial impulse to the empire, the influence of which has spread to every scattered tribe and native state. The accomplishment of the Vancouver's line, and the possible Euphrates Valley Railway, will be important factors in the commercial progress of India, giving trade routes east and west to Europe, and doubling the facilities of communication to and fro.

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* See a most valuable paper on the Economic Resources of India, by Dr. G. Watt, in the *Journal of the Society of Arts*, Feb. 18, 1887.

Kurrachee, in the most north-westerly corner of the empire, is the commercial outlet of the north-west, Beloochistan, and Afghanistan, together with the turquoise and rich fields of Meshed.

Madras for all south and south-east, Bombay for the west, and Calcutta for Bengal and north-east.

Railways and Communications. — *Caravan* routes still run into north India from Afghanistan and Persia, thence through Teheran, Erzeroom to Constantinople, or Tiflis and Russia; or to the Caspian, Orenburg or Tobolsk.

From the important port of Kurrachee a railway line extends to Lahore, and is projected to Peshawur and Quetta, opening up Scinde, the Punjab to the mountains, and Afghanistan. At Lahore, this line joins the main to Delhi and Agra, thence through Cawnpore to Lucknow and Oude, or to Allahabad and Calcutta.

Agra and Delhi have a branch projecting to the sea-coast in Great Western Runn, there joining the main line through Surat by the coast to Bombay.

Bombay and Allahabad also join by direct line.

There is a grand central line from Bombay to the east coast at Madras, and down to Tinnevelly, branching to either shore, either Calicut or Negapatam, returning to Madras by the coast *viâ* Cuddalore and Pondicherry.

Calcutta and the tea districts of Darjeeling, in the hills, also connect by rail.

In Burmah, the only *working* line is from Rangoon into the country to Prome, 170 miles, although further projected lines are being rapidly pushed, and will materially assist to open up this fine country; and in Ceylon, from Colombo to Kandy. Indian railways are still being pushed forward in many directions.

The "roads" are only serviceable during the fine season. The rivers Hooghly, Ganges, Indus, Nerbuddah, Godavery, Kishnah, Brahmapootra, and Irrawady, with their tributaries, which, during the rainy season are deep, together with the canals, give further facility for transit to the seaboard. The Irrawady is navigable all the year round as far as Bhamo, a distance of at least 840 miles from the sea, thus giving a magnificent waterway for a very large and fertile tract of land throughout this length.

Ports.—On the West Coast are Kurrachee, Surat, Damaun, Bombay, Rutnagherry, Goa,—Mangalore, Cannanore, Calicut, Cochin, and several smaller places, called commercially "the Malabar Coast;"—on the East Coast, Tuticorin, Negapatam, Carical, Tranquebar, Cuddalore, Pondicherry, Madras, known as "the Coromandel Coast,"—Masulipatam, Coringa, Vizagapatam, Bimlipatam, Ganjam, Calcutta, Chittagong, Akyab, Goa, Bassein, Rangoon, Martaban, Moulmein, Amherst, Tenasserim, and thence to "the Straits."

Towns.—Many of the towns in Hindostan are essentially military, without any manufactures or trade of importance. A few well-known places in the various districts act as transit stations.

Scinde.—Hydrabad, Shikapoor, and Sukkur.

Punjab.—Mooltan, Lahore, and Peshawur.

Rajpootana, in great part desert.—Oodeypoor, Ajmeer, and Jeypoor.

North-West Provinces.—Delhi, Agra, Cawnpoor, Moradabad, Lucknow, Oude, Allahabad, Mirzapoor, Benares, Chupra, and Mofuzzerpoor.

Bengal.—Rogonatpour, Sombulpoor, Burdwan, Rajmahal, Moorshedabad, Patna, and Darjeeling.

Scindia.—Goona and Gwalior.

Central Provinces.—Nagpoor, Raipoor, Hoshungebad, Chutterpoor, Jubbulpoor, and Sonepoor.

Bombay.—Deesa, Ahmedabad, Cambay, Baroda, Ahmednugger, Meeruj, Kolapoor, &c.

Nizam's Territory.—Hyderabad, Jaulnah, Gulburgah, and Moodgul.

Madras.—Bellary, Gooty, Cuddapah, Nellore, Chittoor, Vellore, Tanjore, Coimbatoor, Neilgherry Hills, Trichinopoly, Ramnad, Tinnevelly, and others.

Mysore.—Seringapatam, Mysore, Bangalore, Nugger, Chittledroog, &c.

Cashmere.—Skardo, Le, Kashtmar, &c.

Nepaul.—Khatmandoo, Jemleh, and Dankuta.

Assam.—Goalpara, Gowhatty, Nowgong, and Silhet.

Burmah.—Aracan, Ava, Prome, Ye, and Pegu.

Closely connected with this trade is Siam with its great port of Bangkok, on the river Meinam.

Minerals.—Scinde produces alum, iron, limestone, and sulphur: *Punjab*, extensively alum, antimony, gold, gypsum, iron, plumbago, and salt; coal beds also exist.

Rajpootana, or Ajmeer, has no economic minerals, being chiefly desert. *Oude*, saltpetre largely.

The *North-West Provinces* yield diamonds, iron, nitre, salt, and saltpetre; and *Bengal*, extensive coal round Burdwan, iron, limestone, lead, and nitre.

The *Central Provinces* have no useful minerals.

The *Nizam's Dominions* have basalt, diamonds, hornblende, felspar, limestone, and sandstone.

Mysore abounds in iron ore, with gold and silver; while *Madras* appears to yield nothing but salt, although lately a new industry has sprung up on the discovery of kaolin or china clay at Whitefield, and works are now being proceeded with at Avady.

Nepaul abounds in copper, iron, jasper, rock crystal, lead, sulphur, zinc, and some gold.

Assam yields extensive coal, as yet only partially developed. This coal bed apparently stretches from Cutch to Assam. Amber, gold, iron, limestone, salt, petroleum, and precious stones.

Cashmere. — Copper, gypsum, iron, lead, limestone, marble, quartz, and sandstone.

Burmah provides antimony, blue limestone, arsenic, coal, gold, iron, lead, marble, nitre, petroleum, quartz, silver, sandstone, sulphur, and precious stones (diamonds, rubies, &c.). The petroleum is specially rich in paraffin.

Thibet is very rich in minerals, possessing cinnabar, gold, lapis lazuli, iron, mercury, nitre, rock-salt, silver, and turquoise.

Taking Hindostan as a whole, the *Northern* parts abound in the richest minerals, but only partially developed.

Thibet seems the richest, and Assam the best worked.

Agriculture, etc.—Hindostan is practically divided into *natural* districts as regards agriculture: the Himalayan district providing forest and hardy grains, being well watered: Lower Bengal, very fruitful, yielding *three* harvests yearly, in the spring, in September, and in November.

North-West Bengal yields more tropical produce; while the Delta gives rice and the palm.

North produces, wheats, barley, Indian corn, &c.; *South*, indigo, sugar-cane, spices, &c.; and *West Ghauts*, tea, coffee, and all fine woods.

India has also universal manufactures of gold and silver, trinkets, and ornamental work. *Wool* is a staple industry in N. India. The characteristic fruits of India are the mango, guava, letchi, nuts, plantains, and pineapples; melons, cucumbers, and other gourds flourish in profusion. Rhea fibre promises a large industry. Immense acreages are covered with lentils and various kinds of pulse. Indian coffee is excellent in quality and enormous in quantity. In some parts of India there are as many as *five* crops of rice yearly.

Wheat and oil-seeds are very largely cultivated. Gums and saps are likewise carefully collected. Japanese lacquer is made from a natural resinous gum, collected from the trees in these districts. *Tea* cultivation is largely increasing, chiefly in Assam, Silhet, and Darjeeling, but it flourishes well in many other parts, as also cocoa and tobacco.

Scinde yields, where cultivated, two crops annually; and produces barley, cotton, fruits, grasses for ropes, hemp, millet, oil-seeds, opium, pulse, sugar, timber, and tobacco; it further exports assafœtida, hides, potash, and spices: the manufactures consist of wooden lacquer work; coarse textiles; leather, paper, and many-coloured sashes and turbans.

Punjab is very fertile along its rivers, producing barley, buckwheat, cotton, fruits, indigo, maize, millet, opium, pease, rice, sugar, sesamum, tobacco, and wheat: its manufactures are cotton fabrics, coloured silk, swords, and firearms.

The exports consist of the above produce and manufactures, together with ghee, hides, horses, wool, and a large number of hawks. The Punjab is the most important wheat-growing province of India.

Rajpootana is famous for its grapes; the natives are indolent, and but little is done on its soil, in parts very fruitful.

The *North West Provinces* produce barley, betel-nut, flax, ginger, cotton, indigo, maize, millet, hemp, opium, oil-seeds, rice, sugar, tobacco, turmeric, timber, and wheat.

Bengal is famous for rice, opium, beans, jute, indigo, fruits, cereals, millet, pulse, betel, tea, cotton, sugar, gums, ebony, sandal, and other woods: it further exports its fabrics of silk and cotton stuffs; and otto of roses.

Central Provinces produce wheat and other cereals, betel, cattle, cotton, pulse, indigo, Indian corn, sugar, and tobacco.

The Nizam's Dominion yields barley, betel, cotton, fruits, hemp, oil-seeds, millet, sugar, and tobacco; a district of wonderful resources, upon which scarcely an impression has yet been made.

Mysore produces fine crops of rice, betel, millet, opium, sugar, and wheat.

Castor-oil plant and tea are now being extensively cultivated.

It has extensive forests: and manufactures cumlies, shawls, and woollen carpets.

Madras is a vast province, and yields valuable teak, ebony, and other woods; cereals, pulse, sugar, and all Eastern fruits; also cotton, coffee, hemp, ginger, pepper, and turmeric.

Its manufactures consist of carpets, muslins, and silks.

Nepaul is a very rich province, yielding timber and valuable cabinet woods; rice, cereals, madder, oranges, pineapples, and sugar; cardamoms, ginger, and other spices; catechu, turmeric, opium, and fibres, cotton, jute, and ghee. Animal exports consist of elephants' teeth, hides, honey, ivory, wax, and falcons.

The manufactures are coarse woollen cloths, bell metal, &c.

Assam is famous for tea, also coffee, caoutchouc, betel, rattans, sugar, valuable timber, gum copal, jute, and lac.

Cashmere yields rice, cereals, timber, saffron, and tobacco; and is famous for its shawls, gun and pistol barrels, leather work, paper, lacquer ware, and otto of roses.

Burmah is the great seat, together with Bangkok, of our rice and teak trade. Other produce consists of cereals, cattle, especially ponies, gram, doll, mustard, sesamum, tobacco, cotton, indigo, sugar, pepper, tea, fruits, and timber.

This territory is naturally attracting prominent notice at the present time, and presents without doubt a grand undeveloped land of "good things," both in mineral and agricultural industries. Mr. Colquhoun, in fact, styles it "the best unopened market in the world."

It has been mentioned that the river Irrawaddy is navigable for at least 840 miles, further railway enterprise is being zealously pushed forward, so that "difficulties of transit" will soon be an expression of the past. The Indian newspapers are at the present time drawing attention as much as possible to this fact, and the immense resources of our new possession.

The *inland* trade is even now very large; but our inquiry tends more to *direct intercourse* and trade with other countries, and the resources of those countries. It is evident, if the local trade between Burmah and India is large and increasing, our commerce must appreciate it, for English goods, ordered perchance by a *Calcutta* merchant from the home country, will be more and more sought after and sent inland.

The many ramifications and subtleties of local trade cannot be rightly understood without personal acquaintance with the places and the habits of the people. Not only does Burmah offer *present* advantages to the commercial trader, but there is a prospect of an enormous transit trade springing up; for "if a direct route could be opened up between British Burmah and South China, an immense field for enterprise and capital would be developed."

The *trade-route* to effect this is a matter even now occupying the serious consideration of leading men; and as to be *first* in any new field ought to be our object, attention should be directed earnestly to opening up the upper portion of our new acquisition of Burmah.

"Among the commodities sent down locally into India may be named dye materials, cereals, cutch, hides, petroleum, unrefined sugar, timber, &c." *

Thibet is very poor in *agriculture*. It is, however, the emporium and entrepôt for the trade from China; and indications are not wanting that a business most remunerative to British traders may shortly be carried on with Thibet by our great dependency.

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* *Homeward Mail.*

This province sends into India bullion, borax, tea, skins, &c.

Regarding the resources of this at present almost unknown country, we would draw attention to a paragraph that appeared in the *Quarterly Review* of July 1886, and which is worth very careful reading. It says:—"Thibet is supposed to be a very mysterious country; but in reality we know a good deal about its trade. The 'brick-tea' business . . . is worth about £160,000 per annum to Chinese merchants, who give, in return for this money, ten million pounds of refuse, which they could dispose of to no other customers. The Thibetans are essentially a commercial people. . . . Silk, gold-lace, precious stones, and carpets are imported from Northern China; leather, saddlery, sheep, horses, salt, and borax are brought from Mongolia and Kachi; from Szechuen, tea, cotton goods, and porcelain; from Tawan, Bhutan, and Sikhim, rice, indigo, coral, pearls, sugar, spices, and Indian wares are imported; and from Ladak and Kashmir, saffron, silk, and Indian produce. There is a promising gold-field in the country. The imports are partly paid for in gold and silver; barter is also largely carried on. The green slopes of Bod-yul produce vast quantities of the finest wool. If the teas of Darjeeling and Assam could be exchanged for Thibetan wool, Bengal might witness the building up of a new industry which would eclipse that of Kashmir in its most flourishing days. Already Indian rupees have passed into the currency of Thibet, and much of the brick-tea is paid for in our Indian coin. Chinese cottons have been supplanted at Lassa by Indian goods. Silks of bright colour are said to fetch their weight in silver, and English woollen goods find a ready sale, in spite of strong Russian competition. There is a great and increasing demand for indigo, upon which profits of from 50 to 100 per cent. have been made. Since the opening of the Darjeeling railway, natives of Thibet have begun to find their way to Calcutta; and the difficulties in the way of opening up the country will, it is hoped, be overcome by our friendly relations with China."

Cambodia, although really outside the "Indian trade," is a fertile plain, abounding in rice, and having a monopoly of the opium trade.

English goods are introduced throughout Hindostan, chiefly by way of Bombay, Madras, and Calcutta.

Our military depôts are supplied likewise from home.

Transit, by mail steamer *viâ* the Suez Canal.

The distance from London to Bombay is 6330 miles; Madras, 7340; and Calcutta, 7950 miles.

List of goods as printed in London and arranged by the Chambers of Commerce.

The following alphabetical list contains *all* the exports from the different ports of the empire.

Aloes, alum, annatto, anise-seed, apparel, arrack, arrowroot, arsenic, assafœtida, barilla, bark, bees'-wax, betel nut, black wood, bones, books, borax or tincal, bran, brimstone, bullion, cake lac, camphor, canes, cardamoms, cassia, castor seed, chassum, chillies, china root, chiretta, churrah, cigars, cinchona bark, cinnamon, cloves, coals, cochineal, cocoa, cocoa-nut oil, cocculus Indicus, coffee, coir, colocynth, columbo root, copra, coral, coriander seed, cotton, cowries, cubebs, cummin seed, cutch or terra Japonica, dates, dholl, dragon's blood, ebony and sapan wood, elephants' teeth, fennigarrick seed, fish oil, furniture, galingals, galls, garlic and onions, ghee, gingelly seed, gram, ground nuts, gums, gunjah, gunny bags, hartall, hemp, hides, hoofs, horns, india rubber, indigo, iron, jackwood, jute, lac dye, lard, linseed, mace, machinery, mathie seed, metals, molasses, mother-o'-pearl, munjeet or madder root, musk, mustard seed, myrabollams, niger seed, nutmegs, nux vomica, oats, oil, olibanum, opium, paddy, palmatine, pease, pepper, pimento, planks and deals, plumbago, poonac or oil-cake, poppy seeds, putchuck, rags, rape, rattans, raw silk, red wood, rhea, rhubarb, rice, roping, rum, safflower, sago, sal ammoniac, salt, salt fish, saltpetre, sandal wood, sarsaparilla, sealing wax, seed lac, senna, shark's fins, shells, shellac, silk, silk piece goods, skins, soap, stick lac, sugar, talc, tallow, tamarinds, tapioca, tea, teel seed, timber, tobacco, tortoise shell, tutenague, turmeric, wheat, wines and spirits, wool and zadoary.

Centres.—Calcutta, Madras, and Bombay rank as the centres of Indian trade. The import of every description of English goods is very large, returning the valuable produce of the country. Each of these centres is an entrepôt for merchandise to and fro; and with other parts of Hindostan excels in jewellery and filagree work; each has cloth spinning, weaving and dyeing works, the prevalent colours being blue and Turkey red.

These centres are famed for embroidery, lacquer and basket ware; all carving and inlaid work. An important industry is flour grinding producing a coarse kind of flour, called *sogee* and *midah.*

Calcutta is the outlet for the noted Dacca fine India muslin: the Benares filagree work; Mirzapore carpets; and the potteries.

Madras has no harbour, the shipping transport being accomplished by boats.

Bombay has some extensive shipbuilding yards. The cotton industry is steadily increasing and likely to develop vast proportions.

As emporiums, transit, and trade centres these ports are in the first rank.

ISLAND TRADE.

A miscellaneous and general trade is done with the various islands lying in the several oceans.—The East and West India Islands are treated separately under their own Trade-Designations.—The latitude and longitude of each island is appended.

Names.—Madagascar, Mauritius, Réunion, Madeira, Cape de Verds, Canary Islands, St. Helena, Ascension, Falkland Islands, Chincas, Lobos, Guanape Islands, Macabi Islands, the Azores, Baker Islands, Bermudas, Ceylon, Prince Edward's Island, Iceland, Newfoundland, Enderbury Islands, Malden Islands, Faroe Islands, Fiji Islands, Fernando Po, Formosa, Howland Island, Ichaboe, Mayotta Islands, Navigator Islands, Sandwich Islands, Society Islands, Tonga or Friendly Islands, Turk's Island, Vancouver's Island, Galapagos Islands, Bahama Islands, New Guinea Islands, New Caledonia or Loyalty Islands, New Hebrides, Solomon Islands, Marquesas Islands, Caroline Islands, Admiralty Islands, Seychelles Islands, Chagos Archipelago, Andaman Islands, Nicobar Islands, Tristan d'Acunha, Heligoland, Malta, Kooria-Mooria, and Socotra.

Many of these islands are solely guano deposits.

Produce.—Madagascar. A very fertile island with rich pasturage, and magnificent forests, but agriculture is much neglected.

The island exports cattle, coffee, cotton, caoutchouc, cocoanuts, cloth, fruits, gums, hides, mats, poultry, rice, rice-bags, rofia cloth, silk, sugar, tobacco, wax, and all kinds of woods.

Evidence is afforded of the prevalence of copper, iron, manganese, nitre, plumbago, and rock-salt, with a little gold and silver. Coal abounds, and might be easily worked.

Agriculture is in a rudimentary state, but the elements of successful cultivation exist, as the island produces allspice, beans, bananas, dye and other woods, ebony, fruits, ginger, indigo, manioc, maize, millet, oil, pepper, sweet potatoes, yams, and medicinal plants.

At present the trade is chiefly with Mauritius and Réunion. Madagascar lies 20° S., 47° E.

Mauritius is very fertile; its chief wealth is in agricultural produce; fine black ebony and other woods abound; inferior iron exists. The trade staple is sugar, with aloes, coffee, cotton, fibre plants, indigo, manioc, maize, mulberry tree, oils, pepper, rice, rum, tortoise-shell, and vanilla.

A large trade is done in cattle with Madagascar. The island is situated 20° 10′ S., 57° 35′ E.

Réunion 21° S., 55° 30′ E.—Cultivation is restricted to the land extending from the shore to the mountains, yielding in abundance aloes, cotton, coffee, cloves, cacao, fruits, manioc, mace, maize, nutmeg, pepper, rum, rice, sugar, tobacco and vanilla.

There are no economic minerals.

Madeira.—The chief product is the grape, yielding the well-known "Madeira wine."

Wine is the chief export.

Arrowroot, coffee, cereals, fruits, and sugar, are also produced. Situated 33° N., 16′ 45″ W.

Cape Verds Islands are fertile, and produce amber, cotton, coffee, fruits, haricots, indigo, maize, sugar, and seeds.

Orchilla, coffee, and oil seeds are the chief exports.

Salt is the only mineral.

An extensive coaling station on the Islands for vessels going south or homeward bound, adds to their general prosperity. Lying 16° 30′ N., 25° W.

Canary Islands.—The chief products are almonds, archil, brandy, barley, barilla, cheese, cotton, cochineal, dates, figs, garlic, lemons, sugar, rum, silk, tobacco, wine, and wax.

Fruits grow well; cereals also, but barley only is exported. Salt is the sole mineral.

Teneriffe is an important coaling station and ships' stores depôt, and lies 28° 25′ N. and 16° 40′ W.

St. Helena, 16° S., 5° 38′ W., exports flax, horn, hides, and wool. It has no useful minerals. It is essentially a port of call for vessels homeward and outward bound. Fruits and vegetables grow abundantly, cotton and other fibre plants thrive.

Ascension, 7° 57′ S., 14° 28′ W., is another island of call: has no minerals, neither yields agricultural produce.

The only supplies beyond ships' stores are turtles.

Falkland Islands.—A port of call for vessels "rounding the Horn."

These islands export bones, hides, seal and whale oil, wool, and skins. Agriculture proper is impossible, owing to the sterility of the soil.

It has an excellent pasturage of "Tussac" grass; sheep do well, the wool being highly priced.

These islands are now exporting frozen mutton.

There are no metals, but some good clay-slate, quartz, and sandstone. The islands lie 51° 40′ S. and 59° W.

Chincas Islands, 13° 25′ S., 75° 20′ W.—Guano deposits, but well-nigh exhausted.

Lobos Islands, 6° 58′ S., 80° 45′ W.—Extensive guano deposits.

Guanape Islands, lying 8° 34′ S. and 78° 51′ W., guano; as also the *Macabi Islands*, lying 7° 50′ S. and 79° 28′ W.

The Azores.—These luxuriant islands produce cereals, coffee, fruits, lupine, sugar-cane, and tobacco; also wine and brandy. The exports consist of beans, brandy, beef, cattle, coarse linens, Indian corn, lemons, oranges, pork, potatoes, wheat and wine. The sowing is done at haphazard, yet yields an abundant harvest; were the agricultural pursuits carried out intelligently and systematically, the riches of these islands would be vastly increased.

There are no economic minerals. The islands are depôts for ships calling; and lie 37° 30′ N. and 26° W.

Baker Island, 0° 13′ N. and 176° 29′ W., and *Howland Island,* 0° 49′ N. and 176° 40′ W., have vast guano deposits.

Bermudas.—These islands have a poor soil, and are unsuited for ordinary agriculture; but fruits grow exuberantly. The finest arrowroot known is here obtained. The chief occupation is orchard and vegetable culture, with poultry rearing. A fine building stone is exported. These products are exported, with fish and some turtle; arrowroot is the staple. Straw and fibre plaiting is carried on. There are no metals. Situated 32° 10′ N., 64° 45′ W.

Ceylon, 7° 40′ N., 80° 50′ E.—This island ships from its ports—Colombo, Trincomalee, and Point de Galle (which latter is a great coaling station, large quantities of English coal being shipped for this destination)—arrowroot, bêche-de-mer, cardamoms, cinnamon, coffee, cacao, cinchona, cocoa-nut and other oils, coir, curry, ebony, fish, ghee, gums, gems, hides, pepper, plumbago, pearls, rice, satin wood, tea and tobacco, with preserved fruits. Coffee was the staple before the disease to the plants broke out. Tea is increasing vastly in importance, as also cacao, india-rubber, tobacco and vanilla. Sericulture is now carried on.

Ceylon possesses valuable cinnamon plantations. Ceylon is rich in gems, and yields also alum, granite, graphite, manganese, nitre, plumbago, and salt. The gems are amethyst, cat's-eyes, cinnamon stones, iolite, rubies, sapphire, topaz, spinels and zircons. There is a very extensive pearl fishery.

The forests contain cocoa-nut palm, ebony, sapan, satin, teak, besides other useful and ornamental woods.

The trade in this island is rapidly increasing, and there seem to be valuable openings in both mineral and agricultural products.

Prince Edward Island, 46° 25′ N., 63° 30′ W., is almost exclusively agricultural, with a fertile soil productive of grain and pulse. The exports are barley, buckwheat, butter, cheese, flour, oats and table vegetables.

Vegetables are nowhere surpassed. Excellent hay is yielded, horse and sheep rearing are extensively carried on. Fishing is good. There are no mineral resources.

Iceland, 65° N., 18° W., has a valuable product in sulphur; chalcedonies and rock-crystals are also obtained. Agriculture is restricted to vegetables and grass. There is but little trade in the island; yet it exports eider-down, fish, feathers, horses, Iceland moss, oil, sulphur, tallow and wool.

Newfoundland, 49° N., 56° W., has considerable export of fish, copper ore, furs, oil, sealskins, seals and skins.

The minerals found, which might be worked to more advantage, are coal, copper, clay-slate, gypsum, iron, lead, mica, porphyry, quartz and salt, with granite, and building stone in abundance.

Agriculture is restricted, potatoes being the chief crop, wheat does fairly well; but pasturage is best suited to the climate.

The industries are agriculture, mining and fishing; the "Newfoundland Banks," so well known for their cod fisheries, form a most important element in trade.

Enderbury Island, 3° 8′ S. and 171° 9′ W., with the *Malden Islands*, 4° 2′ S., 154° 56′ W., are extensive guano deposits.

Faroe Islands, export butter, fish, feathers, skins, tallow and train-oil.

Barley is the only cereal that thrives, but vegetables do well. Minerals consist of copper, iron and opals.

The chief trade is fishing and sheep culture; position 62° 10′ N., 7° W.

Fiji Islands, 16° S., 177° E.—These islands are remarkably fertile, and produce in abundance, arrowroot, cocoa, coffee, cotton, cocoa-nut palm, and all fruits, maize, sugar and tobacco. The fruit trade has enormously increased. A fine cloth is made from the mulberry fibre. The tea-plant has been introduced and thrives well. The exports consist of the above, together with bêche-de-mer, cocoa-nut oil, copra, and pearl shells. English manufactured goods, agricultural implements, and other commodities are introduced.

There are no economic minerals. Trade is increasing, as more intelligent commerce is being introduced.

Fernando Po, 3° 25′ N., 8° 35′ E.—A large trade is done in English coal. The island is very fertile, and grows yams, sugar-cane, and timber very extensively.

There are no minerals, and but little external trade.

Formosa, 23° 30′ N., 121° E., an island in the China Seas, with a trade closely approximating to that of China.

An extensive business is done in camphor, fruits, maize, millet, rice, sugar, and timber.

The minerals are salt and sulphur.

The chief exports are rice and sugar. Trade is increasing, but is capable of greater expansion.

Ichaboe, with extensive deposits of guano, is situated 26° 17′ S., 14° 55′ E.

Mayotta Island, 13° S., and 45° E., is unhealthy, but exports coffee, sugar, &c. There are several good anchorage bays, with a fair trade.

Navigators' Islands, 12° S., 170° W.—These coral islands have a rich fertile soil, and yield arrowroot, bananas, bread fruit, cobia, coffee, cotton, copra, ginger, kernels, mulberry, pineapples, pearl shells, sugar, and nutmeg, with cocoa-nut oil, which latter is the staple. The trade is chiefly in German hands.

Sandwich Islands, 20° N., 156° W.—The exports from

Honolulu consist of arrowroot, cotton, coffee, hides, leather, oranges, rice, sugar, molasses, and tallow. Barley and wheat are a little cultivated.

Salt and lime, with a good building material, are worked.

These islands are becoming shipping depôts, and taking a prominent position in the world's commerce. They are very fertile, and produce coffee, cotton, hides, indigo, rice, sugar, and wool.

Society Islands, 16° S., 150′ W., are fertile, and export arrowroot, bêche-de-mer, cocoa-nut oil, fruits, lime-juice, rani, and shells.

A good import trade is done with Otaheite, English goods being largely introduced, principally by way of Panama, or San Francisco, or direct from Bordeaux by French vessels; also from Australasia.

Friendly Islands, 20° S., 173° W., are extremely fertile, but badly cultivated. They yield in abundance bananas and fruits, nutmegs, sweet potatoes, and yams; arrowroot, bêche-de-mer, cocoa-nut oil, cotton, copra, fibre, pepper, sugar-cane, wool, and tortoiseshell. There is a German coaling station at Vavau.

Turk's Island, 21° 26′ N., 71° 7′ W., supplies large quantities of salt.

Vancouver's Islands, 50° N., 126° W.—With the opening of the Grand Trunk Railway Line of Canada, and the probable diverging of a large portion of the Japanese and China trade, and with the Pacific trade, this island is destined to become one of the greatest shipping depôts and transit stations of the world.

One important element in the progress of the island is the discovery of *coal* in great abundance, worked on the shore, and within a few yards of the vessel requiring this commodity, there being no necessity to sink shafts to the mines.

The fisheries are also most valuable.

Wheat and vegetables thrive well; the country is well adapted for agriculture, and the pasturage for sheep and cattle rearing. It has *all* the elements of prosperity.

Among other minerals found are copper, gold, iron-ore, plumbago, marble, slate, sandstone, and building stone.

Galapagos Islands, 0° 30′ S., 90° 30′ W., produce luxuriant crops of bananas, fruits, Indian corn, sweet potatoes, and sugar-cane, but have hitherto been out of the range of maritime trade.

These islands may eventually become coaling stations, for which they are well suited, as well as being available for produce export.

Bahama Islands, 25° N., 76° W., are not so productive as the West Indian Islands, but they yield *pine-apples*, oranges, tomatoes, &c. Cotton and all fibrous plants flourish well, as also tobacco and the castor-oil plant.

A good trade is done in sponges.

There is a great growth of forests, containing fancy and dye-woods, lignum vitæ, mahogany, ebony, satin-wood, iron-wood, logwood, and mastic.

Cattle are largely reared, and a considerable trade in turtles is pursued. Alum is found, and a large quantity of salt.

New Guinea Island, or Papua, 6° S., 141° E., is but little known, its interior never having been explored.

The forests seem to abound in gigantic trees. The camphor-tree, fruits, maize, sago-palm, rice, &c., grow luxuriantly.

Nutmegs and spice grow wild; medicinal bark is also collected.

Recent German and British settlements in New Guinea are the most promising features of this fine island, in the development, especially, of the mineral resources which are known to exist, and likely to become the basis of a flourishing trade. Port Moresby is the chief British station.

New Caledonia (Loyalty Is.), 21° S., 165° E.; *New Hebrides*, 16° S., 168° E. *Solomon Islands*, 7° S., 158° E.; *Marquesas*, 8° S., 140° W. *Caroline Island*, 7° N., 156° E.; and the *Admiralty Islands*, 3° S., 145° E. These islands in common are exuberant in tropical or Indian produce, but the pursuits of commerce have hitherto been completely checked by the treacherous character of the natives.

Seychelles Islands, 4° S., 57° E.

These islands are admirably adapted for commerce, being perfectly safe on all coasts.

They produce cocoa, cocoa-nut oil, coffee, cotton, cereals, Indian corn, and tobacco; and also abound in timber both useful and ornamental.

The exports from Mahé include the above with pepper and cocoa-nuts.

Andaman Islands, 12° N., 93° E., yield luxuriant crops of coffee, rice, nutmegs, &c. They have excellent pasturage, and extensive timber forests. The tea-garden in the islands is assuming large proportions; it was started in about the year 1876, and the present year's yield is expected to reach between 50,000 and 60,000 lbs.

Nicobar Islands, 8° N., 93° E., produce mainly teak, cocoa-nuts, plantains, and pineapples.

Tristan d'Acunha, 38° S., 13° W. Not much trade, but produces sheep, cattle, and potatoes. It has good fisheries.

Heligoland, 54° 11′ N., 7° 53′ E., is famed for its oyster bank, lobsters, and haddock fisheries.

Malta, 35° 53′ N., 14° 27′ E., is a *very* extensive coal station, many hundreds of thousands of tons being sent out from England during the year.

It is highly cultivated, and produces cotton, cereals, figs, grapes, honey, melons, potatoes, pulse, sesamum, and cumin-seed.

Malta is noted as an important entrepôt emporium and transit station.

Kooria-Mooria Islands, 17° 40′ N., 56° E. Extensive guano deposits.

Socotra, 12° 30′ N., 53° 45′ E., produces aloes, which are said to be the finest in the world; also dates, figs, fruits, and dragon's blood.

The Chagos Archipelago, 6° S., 70° 12′ E. Diego Garcia is becoming a place of call and coaling for ships and steamships.

This is a new trade, the exports being cotton, cacao, cocoa-nut oil, fish, and tortoiseshell.

The trade is increasing, and shows that by keen commercial foresight, these islands may rank as important trade-centres.

It would be well to consider, the position, faculty for shipping, harbours, imports and exports, of the respective islands named, and watch the growth of trade; and where possible *push on* for our own commercial benefit.

JAPANESE TRADE.

The Islands of Japan, which form the "natural division" of this trade, teem with a population, denser possibly, in proportion to their area, than in any other portion of the globe.

Yeddo, Nagasaki, Yokohama, and Hakodadi, the largest cities of this formerly more exclusive empire than even that of China, have received expansion from the complete change of policy which, in the current age, has thrown the ports open to European intercourse.

The Japanese are an industrious, painstaking, skilful, and persevering people, whose energy has turned the country into a cultivated garden; the extremes of climatic conditions, —of islands which, in their length, stretch through a good many degrees of latitude, being utilised with wonderful effect in the produce of the soil.

The Japanese trade of the past may be regarded as confined to China, with which empire it was always considerable. Intercourse with the Dutch and English has been carried on only under rigorous restrictions.

The introduction of Western manners and customs, which have taken a firm root in the empire, has given a stimulus to commerce, which will be further promoted by the new intercolonial railway between Vancouver and the Atlantic, abridging the distance from Europe by several hundred miles.

Railways, etc.—The only existing lines at present in Japan are, Yokohama to Tokio (Yeddo), 18 miles, and the Nakasendo line from Takasaki to Yokohama. Also Tokio to Utsunomiya, 66 miles, with intended projection to Fukushima. While in Niphon, Kobe, Oosaka and Kioto join by rail. The total mileage in 1885 was about 400 miles.

For the rest, communication is by road to the seaboard and coastwise.

Ports.—Foreign shipping is restricted to the open ports of Yeddo, Yokohama, Nagasaki, Hakodadi, Simoda, Hiogo and Oosaka, Niegata and Kobe.

There are also ports closed to foreigners at Kagosima, Sadowara, Tsikuzen, Sibara, Takata, Yesso Matsmai, and others.

Towns.—The towns are chiefly on the coast; there are many manufactures, the Japanese being equal to the Chinese in works of copper, steel, iron, instruments, glass, silk and cotton goods, good fibre paper and cordage.

Japanning or lacquered ware, and porcelain, superior even to the Chinese, are important industries.

Minerals.—Japan appears to be rich in minerals; *coal* is mined near Nagasaki, making it possible to get a cargo of this mineral for conveyance to other ports, and also being of much commercial utility for steamers having long steaming voyages before them. This mineral is largely shipped coastwise, and to China.

The islands abound in copper, iron, lead, tin and sulphur, with some gold and silver; the tin and copper are of very superior quality.

Agate, cornelian, and rock crystal are obtained, and ambergris is found on the shore.

Agriculture, etc.—Japan is rich in every agricultural product, even more through the plodding industry of the people, than from favoured conditions of climate.

Silk is the staple, with tea. In the various districts of the islands are cultivated bamboo, barley, camphor, laurel, cereals, cotton, ginger, indigo, oranges, paper, mulberry, palm, pomegranate, pepper, sugar, silk, tea, tobacco, wheat, vegetable wax tree furnishing lacquer, varnish trees and fine timber, with rice, for which there are two harvests.

The mulberry tree for silkworm rearing is largely grown; camphor is increasing as an article of export.

Steamships usually call from port to port in Japan *and* China to fill up; the Japanese exports being, aroabee, beans, cuttle-fish, cotton, coal, copper, camphor, crape, beans, dried fish, deer horns, flax, genson, gall-nuts, hides, isinglass, indigo, lacquer, oil, paper, pease, rape-seed, rice, silk, sulphur, sea-weed, tea, tobacco, timber, vegetable wax, tow, wheat; poultry and cattle.

Japanese manufactured cottons, silks, and porcelain are much esteemed.

English goods.—A large trade is done in English manufactures and commodities by the mail and trading steamers.

Transit.—By mail steamer *viâ* the Suez Canal, and *viâ* San Francisco; with alternative routes, in the near future, of the

Canadian line through Vancouver and of the Panama Canal.

Viâ Suez Canal, London to Yokohama, is 11,245 miles; Nagasaki, 10,775; Osaka, 11,085; and Hakodadi, 11,535 miles.

The direct route is still preferred for the new season teas, silk and produce, although a large American trade is done *viâ* San Francisco; but it is hoped with the New Canadian-Pacific line *viâ* Vancouver's Island, — being throughout British territory,—a large trade will develop with China and Japan of a highly remunerative character, being solely in British hands.

Centre.—*Yokohama* must be taken as the central point of this trade; it is situated some 18 miles from Yeddo, the capital. Since the opening of this port to foreign commerce, it has vastly increased, and now possesses warehouses and all the necessary aids to profitable commerce.

Yokohama has no home manufactures, but as an emporium enjoys a large and increasing trade: it is an entrepôt for all Japanese produce, manufactures, and works of art, as also for English commodities, and drives a thriving coasting trade.

LEVANT TRADE.

The "Levant" proper is the eastern end of the Mediterranean, but for the purposes of trade it extends to the latitude of Smyrna, which port is the chief of the "Levant Trade," and for geographical reference this area may be described as "The Mediterranean Sea Coast from Smyrna to Alexandria, *south* of the line described in the Black Sea Trade, Area 2 (Smyrna, Angora, Tokat, and Lake Van), extended S. to the Syrian desert through Mosul." A glance will show the fertile tract of country enclosed by these imaginary lines, which constitutes the Trade.

The commercial meaning of this Trade *now*, is very different from what it was in the old caravan days, when Constantinople was the centre of trade.

The standard tariff for goods and produce from the Levant as arranged in London is as follows:—Agaric, almonds, aloes, alum, anise-seed, balustines, barley, beans, boxwood, brimstone, camel's hair, camphor, carpets, cass-fistula, caviare, cocculus indicus, coffee, colquintida, copper, cotton-wool, cotton-yarn, currants, dragon's-blood, emery-stone, figs, flax, galls, goat's hair, gums, gum arabic, hare skins, hides, honey, hemp, linseed, madder roots, mohair yarn, natron, nuts, nux des bin, nux vomica, olive oil, olibanum, opium, orpiment, oil-seeds, otto of roses, pease, pellitory root, pistachio nuts, raisins, rhubarb, rice, saffron, sal ammoniac, salip, scammony, seeds, senna, shagreen skins, sheep's wool, silk, soap, skins, sponge, tallow, terra umbra, tobacco, turbith, turmeric, turpentine, valonia, wax, wheat, whetstones, whisk brooms, wine, wool, wood-ashes, wormwood, yellow berries, and zedoary.

This area is still intersected by the old roads, and the caravanserais at the towns *en route* still exist. Trade commodities to this day, find their way to the nearest seaport, by means of caravans.

The area embraces the whole of the Holy Land, taking in the ports between Alexandria in Egypt, and Alexandretta in Syria, both inclusive.

Surveys for railway construction uniting the valley of the rivers Euphrates and Tigris with the East and Europe, show the activity of modern enterprise over this ancient field of trade.

The trade of Smyrna is very large, and chiefly in the hands of Greeks, but the produce and exports come in many, if not most, instances by English vessels.

Railways, etc.—The only available railway line at present is from Smyrna to Kassaba, and Smyrna to Aidin, through Ephesus, all other transit being by caravan roads and streams.

The rivers are Gediz-Chai, with its mouth near Smyrna, running close to the town of Ushak; the Meander, with the town of Aidin on its banks, which town ranks next to Smyrna. The Kizil Irmak also touches portions of this area near Kaisariyeh, flowing northwards.

The Seihun-Chai with the town of Adana.

The rivers Euphrates and Tigris also enter the area in its eastern parts, giving an easy stream transit to the Persian Gulf. There are smaller rivers and streams, but of little moment.

For railway extension see remarks under Black Sea trade, area 2.

Ports.—These are, Smyrna, Iskenderoon (Alexandretta), Adalia, Latakeiyeh, Tripoli, Beyrout, Saide now merged in Beyrout, Acre, Jaffa, and Gaza.

The Islands of Cos, Samos, and Chios; Rhodes; and Cyprus, with its ports of Nicosia, Famagousta, Larnaca, and Limasol.

Towns.—In addition to the ports, the following stand on the caravan routes: Akhissar, Allah-shehr, Aidin, Ushak, Afium Kara-Hissar, Albostan, Isbarta, Koniyeh, Bey-shehr, Adana, Kaisariyeh, Marash, Mardin, Malatia, Diabekir, Nisibin, Mosul, Orfah, Rakkal, Antakia, Tadmor, Aleppo, and Damascus, with Jerusalem.

Minerals.—Apparently abundant, but little utilised.

Gypsum, salt, and sulphur throughout *Anatolia:* copper at Tokat and Tireboli: alum and iron in Angora.

Nitre near Koniyeh, and marble in all parts. Manissa, near Kassaba, is noted for loadstones.

There are stone quaxries at Aleppo; iron throughout Syria, but little worked.

Copper and iron are both partially worked at Damascus.

Cyprus yields asbestos, copper, ochre, salt, talc, and umber. In the island of Samos are iron, lead, and silver, but not worked; also marble. This island is noted for its pottery.

Mitylene supplies marble; Marash has iron and steel mines; Mardin, limestone; and Mosul, marble.

Agriculture, etc.—Smyrna, as the chief centre, and as an emporium, exports cotton, carpets, and dried fruits extensively, drugs, figs, fruit, fez caps, gums, gall, liquorice, lambskins, madder, mohair, opium, silk, shawls, sponges, valonia, wool, wheat, and barley; also otto of roses, the scent of which impregnates the air.

A scarlet cloth comes from Akhissar. Afium Kara-Hissar very largely deals in opium,—Afium, means opium,—and being an entrepôt on the great caravan route from Constantinople and Smyrna, to Armenia, Persia, and Euphrates, is an emporium for wool fabrics and tapestry, fire-arms and sabres.

Round Adalia fruits are most abundant. Karaman furnishes a blue cotton cloth. Aleppo furnishes cotton and wool, shawls, silk, and lace richly embroidered with gold.

Cereals abound throughout Karamania, also cotton, fruits, silk, sesame, tobacco, and cattle, for which the pasture-land is well suited.

In Syria, and throughout this neighbourhood, the cultivation of the mulberry tree is carried on, and cereals, cotton, fruits, indigo, olives, and tobacco grown.

Beyrout transports cotton and silk goods, galls, gum, madder, oil, tobacco, and wine.

The islands of *Cos* and *Chios* supply cotton, cereals, fruits, mastic, oil, silk, and velvet fabrics. *Rhodes* exports oil, skins, sponges, valonia, and wax.

Damascus is luxuriant in fruits, and is an important entrepôt on the great caravan routes; supplies cotton, damask, and silk; manufactures and exports damasks, silks, gold and silver ornaments, and sabres.

Cotton, fruit, leather, silk, and wool also come from round *Diabekir.*

The island of *Cyprus* produces barley, cotton, fruits, flax, madder, silk, sesame, tobacco, wheat, and wine; with morocco leather and carpets from its town of Nicosia. The chief articles of export are carobs, wheat, barley, straw, linseed, sesame, wine, spirits, raisins, fruit and vegetables, wool, raw cotton, silk cocoons, hides and skins, sumach, cheeses, sponges, gypsum, and terra umbra. There is an immense field open for enterprise in this island, its resources, owing to climate, are almost exhaustless and comprise every product of the vegetable kingdom; trade is steadily increasing.

Koniyeh finds carpets, cotton, hides, leather, and wool, and with annual inundations good crops of cereals.

Kaisariyeh produces a blue dye, berries, cotton, madder, and gall-nuts. The mulberry tree and all fruits grow in great abundance round *Adalia.*

Latakeiyeh is a port for the great caravan routes, and has an extensive growth of tobacco in its neighbourhood, for which it is noted, and exports, together with barley, cotton, galls, sesame, silk, wines, wax, and wool.

Tripoli, another shipping port, gives sponges, silk, fruits, cotton, cochineal, galls, sesame, tobacco, and wool.

Saida and the Southern Syrian ports export barley, cotton, cotton-seed, coffee, cochineal, colocynth, cloth, fruit, indigo, iron and steel, millet, oranges, olive-oil, rags, sugar, silk, sesame, seed, soap, tobacco, wheat, and wool.

Samos, *Mitylene*, and *Marash* have cereals, fruits, and wine; the latter also rice, tobacco, and cattle. *Mosul* is a centre for Bagdad, Syria, and Constantinople, and manufactures cotton stuffs, napkins, and "muslins,"—hence the name.

Nisibin makes coarse cottons and woollens, and grows pulse, tobacco, and wheat. *Orfah*, coarse woollens and cotton cloth; whilst *Ushak* is the home of the best carpets.

English Goods.—Smyrna is the chief receptacle for English goods; coal is sent both to Smyrna and Larnaca; while English manufactures find their way into the interior from Smyrna by the caravan routes, and are also distributed by the coasting steamers running down to Alexandria.

Transit.—The shortest route to Smyrna is *viâ* Constantinople, from whence by sea it is 300 miles, or by land 270 miles.

Smyrna is 2945 miles from London by sea. Smyrna to Afium Kara Hissar is about 200 miles, Angora 350, and Koniyeh 335 miles.

Centre.—Smyrna poses as the centre of the "Levant trade," situated on a fine and sheltered coast, and at the termination of the caravan routes, it is a vast emporium for Persian, Syrian, and Asiatic Turkey manufactures and produce. Seeing the costliness of the carpets, tapestries, textiles, the essences and perfumes, some idea of the wealth of this city, as an emporium, may be estimated.

The fruits, drugs, dyes, wools, &c., all come through Smyrna. There are no local manufactures, the mainstay of the port being its shipping and transit trade.

It has regular coasting communication with the Levant and Alexandria, the Adriatic and Constantinople.

Smyrna absorbs some English coal and large parcels of general goods.

MEDITERRANEAN TRADE.

This title speaks for itself. It embraces all the trade carried on—after passing Gibraltar—along the shores of Spain, South France, Italy, the Adriatic, the Islands, and the north shore of Africa, from Port Said to Tetuan; an imaginary *inland* line being drawn from Gibraltar through Jaen, Cuenca, Saragossa, Andorra, in Spain; Toulouse, Lyons, Chambery, in France; along the geographical division of N. Italy; through Gratz and Agram in Austria; then through Bosna-Serai and Janina across to Larissa; and on the south shore, embracing the recognised geographical countries on the Mediterranean seaboard.

The tract of country in Europe lying N. of this line, to the line described under the "General trade," forms the Intermediate Zone.

The vast tracts of land, fertile and well adapted for cereals, pulse and fruit growing, the iron and other mines yet unopened, show that, if given easy communication with the coast, a large amount of produce might still be poured into our markets.

The Mediterranean trade comprises the carrying of every conceivable kind of merchandise: coal from England to all our important coaling stations; general goods of English manufacture to all ports; and in return bringing the ores of Northern Africa and of Spain; the cereals, fruits, and manufactures of Morocco, Tunis, Algeria, and Egypt; the wines and fruits of Spain; the manufactured silks, and all produce, either raw or worked, which find an outlet at Marseilles. Add to these the wines of Cette; the cereals, iron ores, marbles, wine, fruits, and manufactures of Italy and Switzerland, sent south; the overflowings of Austria and Turkey, by the Adriatic and the shores of Greece, with the ores of Laurium.

Then, again, the Mediterranean Sea is the highway to the East, Black Sea, Azov and Levant. All the riches of India, China, Japan, the East Indian Islands, and Persia, coming *viâ* the Suez Canal, help to constitute the trade.

Steamers require coaling *en route*, and merchandise is discharged at various ports, and often re-shipped for short passages, employing many English bottoms.

The geographical position of any site determines whether it is to the interest of the grower or supplier to send his goods South about or North about.

Another element of trade must here be carefully noted by a merchant or student of commerce; it is well known that transit by *water* is always cheaper than carriage by *land*, therefore, in places removed from business centres, it will be ofttimes possible for countries far distant to supply *equal* commodities *transported by sea* at a lower cost than a neighbouring country with shorter transit, but that *by land.*

This question must not be lost sight of in tracing a market for new goods or a new market for old goods: it is a commercial question entirely outside that of *duties* on commodities, but this latter is a point which every trading merchant *must* know if he does business at all.

This Mediterranean area is, of course, well looked after not only by English traders, but by our commercial opponents abroad; yet, as an example that this is a fact, see what the *Quarterly Review* of July 1886 says on this subject and touching a portion of this very area: "Take the little island of Corsica, it is not very far away, . . . but not until last month was it found that a considerable opening for trade exists there. Our manufacturers will compete, under very favourable circumstances, with those of the North of France, who have to pay railway freight to Marseilles, while our goods can be sent all the way by water. . . . Many important articles are brought from Germany and other countries which could be obtained cheaper and better in England," &c. Our merchants and manufacturers *must* therefore adapt themselves to the *real requirements* of foreign markets.

Look at the map, and work eastwards from Gibraltar. Spain has its outlets by the Guadalquiver, by the Ebro, or by North Spain through Bilbao and San Sebastian; by rail through France; and by the Mediterranean ports,—there is the extra facility of a canal Huelva to Cartagena;—so that it is optional to the producer to send his goods to market by any of these routes.

Which is best? This is the commercial question. The vast exports of Barcelona, Tarragona, and Valencia prove that this coast is the most economical route,—except for *special* produce on the other seaboards;—were the excessive charges at these ports reduced, and railway and road facility more developed, the results to commerce would be enormous; for the trade would be proportionately increased.

France, again, has its fine system of railways, its numerous canals, and natural outlets by the great ports of Marseilles, at the mouth of the Rhone, on the Mediterranean, Bordeaux, at the mouth of the Garonne, on the Bay of Biscay, Nantes (a shallow port), also on the Bay of Biscay, and Havre (Rouen), at the mouth of the Seine, on the English Channel, and several minor ports.

It is very difficult to analyse the French trade as a whole, the silk and lace manufactures going to English dependencies, as well as to England; the English manufactures going to France to be *re-doctored*, and *vice versâ.* This course gives an immense impulse to trade at all these ports, without much superiority to any.

Marseilles being also a considerable mail station has rather the best position; it is also the outlet to the whole world East and West below latitude 44° N.

Italy has its Adriatic and Mediterranean seaboards; the former being more the outlet for goods bound East *viâ* Alexandria, than for English markets.

Austria and *Turkey* send *viâ* the Danube, and the trade except for flour to America, wood to Alexandria, and a few cereals at Ragusa and Pola, is very restricted. The trade done at the *Ionian Islands* of Zante, Cephalonia, and Corfu during the fruit season, is very large. There is room for the development of an equally extensive trade on the mainland.

Greece, as far as trade is concerned, is a nullity,—a little coal to the Piræus, a little ore from Laurium and the islands, and the fruit trade, during the season, at Patras, is the substance of it.

Yet, the Greeks, overflowing to *other* trading centres, in many cases enjoy a monopoly of the trade, as in the Levant and Danube.

On the African shore the overflowings of the Nile, to the enrichment of the ground, produce large crops of cereals and cotton seed, which find their way to the coast, not in the Red Sea only a few miles distant, but by the stream to Alexandria.

Compared with European commerce, the trade of Tunis, Algiers, &c., may be called a *coast* business. There are no intricacies of transit, as will be seen when these districts are considered.

Railways and Communications.—In such an area it will be impossible to *detail*, but we endeavour to give clearly the main lines, canals, and rivers in each country.

Spain is entered from Bayonne at San Sebastian, on the one hand, and Perpignan Gerona on the south, by the great European lines.

In the Mediterranean area, we can only deal with the southern line, which skirts the sea-shore to all ports to Valencia, with only one branch at Barcelona, Tarragona; thus ʌ to Saragossa, the north coast, and central Spain for Madrid.

From Valencia, the line runs inland for Albacete, Alcazar, Toledo, and Madrid, but branches to the ports of Alicante and Cartagena.

The only other railway line in all this seaboard is a branch of the Seville-Madrid line to Malaga, on the coast, and Grenada, inland.

Canals.—There is the *Lorca* canal from Cartagena to the Guadiana and Guadalquiver. The rivers Segura for Murcia, Ebro for Mequinenza, joining the *Imperial* Canal for Saragossa and the north.

For the rest, Spanish growers are dependent upon the roads for transit.

Proceeding east, we enter France, with its seaboard from Port Vendre to Mentone, of about 330 miles, served by the railways from Paris—whence are connections with every European country—*viâ* Macon, Dijon, and Lyons to Marseilles; or Lyons, Grenoble, Marseilles; either route being a transit route with Switzerland, &c.

Again Paris, Nevers, Clermont, Nîmes, Montpelier, and Marseilles or Cette.

Or, Paris, Orleans, Limoges, Agers, Toulouse, and Cette; or Bordeaux and Cette, with a coast line from Port Vendre to Mentone; so that it will be clearly seen that by any of these *direct* routes the *whole* of France is in easy transit with the Mediterranean seaboard. Whether the laces, velvets, and silks of Lyons, the manufactures of Dijon, St. Etienne, Clermond-Ferrand, Moulins, Angoulême, or Toulouse, all have a *direct* transit route with the Mediterranean, and *vice versâ.*

The river Rhone is the only river of consequence, that flows into the Mediterranean in French territory: there are also many canals.

The seaboard line to Mentone referred to continues into Italy, running on the *sea-coast* to Rome, being joined at the more important seaport towns of Savona and Genoa, by the lines running off the great mail lines from Paris, *viâ* Mont Cenis and Turin; connecting also with Switzerland by the new St. Gothard tunnel.

From Rome the line trends inland, but still runs *parallel* with the coast, converging again at Naples, Castel-a-Mare, and Salerno, from which port it runs in a nearly easterly direction to the sea, in the Gulf of Taranto, meeting here the *coast* line running, on the one hand, to Reggio, and, on the other, by the coast, right up to Rimini, and from thence in a north-westerly direction to Turin.

This is the great mail route to the East *viâ* Brindisi;—branching at Bologna for Venice and the Austrian ports.

From Valencia in Spain, to Rimini, on the east coast of Italy, there is an almost uninterrupted *coast* line; a traveller can take this whole circuitous route and practically never lose sight of the sea.

In Austria the line is continued to Trieste and Fiume, and there ends, as far as the coast is concerned; but works inland to Gratz, Agram, Vienna, and the Danube, and is also an outlet for Germany and Northern Europe *viâ* Ulm.

To this point the only rivers of commercial importance are, the Arno, and the Po with tributaries.

From here to Volo, beyond a few miles of rail at Spalatro, there are but few attempts made to bring the produce of the interior to the seaboard by means of railways:—total rail mileage, 330 miles—neither are the streams of importance.

Turning to the African shore, beyond Alexandria, Damietta and Port Said, which joins by canal with Suez, and the first two by rail, with Cairo and Suez, throughout this whole range of coast there is no railway, except from the port of Philippeville to Constantine, 45 miles; Bona to Guelma, 40 miles; from Algiers to Oran, *viâ* Orleansville, about 250 miles, and round the city of Tunis.

Surely, here is a field for a grand commercial prosperity? For the old caravan routes from the interior, bring riches and produce, which would benefit trade in a remarkable degree, were they transported more quickly and by easier means.

Ports.—(Principal). There are many shallow-water ports with unrestricted charges, that open up remunerative reciprocity to the keen commercial man.

In *Spain*, Gibraltar, Marbella, Malaga, Almeria, Aguilas, Denia, Carthagena, Alicante, Valencia, Tarragona, Barcelona, and Mataro.

France, Cette, Marseilles, Toulon, Hyéres, and Nice.

Italy, Savona, Genoa, Chiavari, Spezzia, Leghorn, Civita Vecchia, Naples, Castel-a-Mare, Salerno, Reggio, Taranto, Gallipoli, Otranto, Brindisi, Bari, Barletta, Manfredonia, Ancona, and Venice.

Austria, Trieste, Pola, Fiume, Spalatro, Ragusa and Cattaro.

Turkey, Prevesa.

Greece, Vonitza, Navarino, Koron, Nauplia, Piraeus, Corinth, Patras, Mesolonghi, and Volo.

Islands Corfu, Argostoli, (Cephalonia), Zante, Seriphos and neighbourhood, Canea, Candia, (Crete): Malta.

Sicily, Marsala, Trapani, Castelamare, Palermo, Termini, Milazzo, Messina, Catania, Syracusa, Licata, and Gir genti.

Elba; *Sardinia* with Porto Torres, Alghero, Oristano and Cagliari; *Corsica*, Bastia, Cavallo, and Ajaccio.

In the Balearic Islands, Iviza, Inglesia, Alcudia, and Port Mahon.

On the south side, Port Said, Damietta, Rosetta (Aboukir), and Alexandria, in *Egypt.*

Bengazi and Tripoli in *Tripoli.*

Cabes, Susa, Sfax, Tunis and Bizerta, in *Tunis.*

Lacala, Bona, Philippeville, Bougiah, Tenes, Algiers, Mostaganem, Arzew, and Oran, in *Algeria.*

Melilla, Badis, Tetuan and Ceuta, in *Morocco.*

Towns.—(Commercially important, with easy transit to seaboard).

Spain, Grenada, Jean, Ciudad Real, Toledo, Madrid, Alcazar, Albacete, Murcia, Cuenca, Teruel, Saragossa, Soria, Huesca, Lerida, Andorra, and Gerona.

France.—Toulouse, Carcassoune, Aurillac, Rodez, Montauban, Clermont, Nevers, Moulins, Montbrison, St. Etienne, Dijon, Macon, Lyons, Clermond Ferrand, Valence, Privas, Avignon, Nîmes, Besançon, Chambery, Grenoble, Gap, Draguignan, Grasse, &c.

Italy, Mondovi, Saluzzo, Susa, Turin, Biella, Vercelli, Alessandria, Milan, Bergamo, Brescia, Piacenza, Cremona, Modena, Lucca, Pisa, Florence, Siena, Rome, Capua, Evoli, Cosenza, Aquila, Bologna, Ravenna, Ferrara, Mantua, Verona, Padua, Bassano, and Belluno.

Austria, Innsbruck (Munich, Ulm), Linz, Vienna, Pressburg, Gratz, Klagenfurt, Agram, Salzburg, and Stuhl Weissenberg.

Dalmatia, Kuin.

Turkey, Banyaluka, Bosna-Serai, Mostar, Zettinge, Novibasar, Skodra (Dulcigno), Prisrend, Avlona, Yanina, and Arta.

Greece, Larissa, Phersala, Levadia, Athens, Tripolitza, and Nisi.

Egypt, Cairo and Massourah.

Tunis, Keff, Kairwan, and Beja.

Algeria, Guelma, Constantine, Biskara, Setif, Bognar, Blidah, Orleansville, and Berizina.

Morocco, Temessuin, Fez, Medrara, Abuam, Guirlan, and Tafilet.

Minerals.—Confining our remarks to the southern part of each country, we find in *Spain* quicksilver at Almaden, in New Castile; barilla, calamine, copper, iron, lead, quicksilver, silver ore, zinc, and some sulphur are worked in Andalusia, Murcia, and South New Castile, and shipped at all ports from Motril to Cartagena.

There are salt mines, alabaster, marble, and jasper quarries in various parts of Spain, also many precious stones; but these are barely worked.

In *France* we find coal round St. Etienne, and in various other parts of South France, but it is not *much exported;* it supplies, in part, the manufacturing towns, and some steamers with their "bunker coal," but does not enter as an important article of export trade.

In fact, the supply is not equal to the demand, and England exports largely to these ports, sending also small coal for patent fuel, and patent fuel itself.

Iron is worked in several of the south-central departments. Manganese also is widely diffused.

Salt is worked in the south, and exported from Hyères and the Pyrenees side.

Italy gives her fine marble, quarried in the centre, and shipped at Civita Vecchia and other ports on the west coast, so well known as Carrara marble. Iron in Lombardy.

Sulphur in immense quantities in all parts of Sicily; salt at Trapani; sulphur and lead-ore in Corsica, Sardinia, and Elba.

Some slate is exported from the neighbourhood of Chiavari; and from Spezzia, lead, manganese, silver, and sandstone. Alum, charcoal, and Roman cement are also shipped from Civita Vecchia. Corals from the west side. Salt is shipped at Manfredonia and other ports in this part of the east coast. The other minerals are antimony, amianthus, gypsum, boracic acid, copper, zinc, and a little gold.

There is very little mineral work in Dalmatia.

Chrome ore from Laurium and other islands on the east coast of Greece; while Zanté is noted for pitch springs.

The west Turkish ports provide no minerals.

Egypt and Tripoli ship no minerals; but the former possesses alabaster, limestone, marble, nitre, red granite, petroleum, and salt, but they are not well worked.

Alum and lead are worked, and exported from Tunis; and there are fine veins of lead and some salt yet to be mined in the interior.

Algeria is rich in copper, iron, and lead; there are also yet undeveloped deposits of cinnabar, nitre, quicksilver, talc, salt, and potter's clay.

Morocco has extensive copper-ore mines; there are also iron and lead mines to be worked.

Agriculture, etc.—The *Spanish ports* send us from their own neighbourhood and the interior almonds, anchovies, brandy, esparto grass, figs, grapes, lemons, oranges, olives and oil, nuts, wines, and seeds; cottons, fire-arms, lace, papers, ribbons, silk, soap, and woollens.

The *Balearic Islands* export barley, brandy, cheese, dried fruits, and honey.

France (South).—*Cette* wines, brandy, fruits, spirits, oil-cake from *Marseilles*, silks, velvets, lace, and other manufactured goods from the interior, anchovies, dried fruits, sardines, olive oil, and wines. *Toulon* sending almonds, capers, figs, oranges, raisins, soap, and hosiery; *Cannes* and *Nice*, fruits, oil, soap, and perfumery.

Corsica supplies coral, skins, oil, wine, wood, and bricks.

Italy gives celebrated wines; finest olives and oil, *the staples*, from *Tuscany*, *Liguria*, and *Bari:* lemons, chestnuts, staves, earthenware, and all fruits. *Genoa* from inland, besides the above, cheese, damasks, flax, gloves, hemp, jewellery, paper, soaps, silks, and vermicelli. *Chiavari*, anchovies. *Leghorn* and neighbourhood, silks, straw hats (Leghorns), straw plaitings, anchovies, borax, coral, manna, rags, and sumach.

Naples, fruits, gloves, oils, and perfumes. The *Southern ports* beans, citrons, cotton, cream of tartar, cheese, fruits, figs, linseed, oats, oil, and wheat. *Bari* and *Barletta*, cereals, fruits, and wine largely. Neighbourhood of *Ancona*, cheese, grain, hemp, fruits, silk, skins, and wood. *Venice*, bones, glass ware, silk goods, and books.

Sicily, cereals, fruits, madder, maccaroni, oils, pistachio nuts, pulse, sumach, and wine.

Sardinia, cereals, pulse, oil, and wine.

Wurtemburg and interior states send down cereals, cattle, and manufactures.

Austria, cereals (especially barley), flour, lumber, seeds, staves, tobacco, wood, wine, and manufactured goods from inland.

Dalmatia, cattle, cereals, silk, maraschino, oils, silk, tobacco, and wax.

Montenegro is chiefly agricultural, yielding maize, potatoes, sumach; also sardines and hides.

Greece gives wool; every description of fruit; some gum, hides, honey, oil, wax, wine, silks, and sponges; but agriculture is generally backward. Valonia is shipped from ports in the Gulf of Corinth.

Patras and the Ionian Islands are our currant stores, and give also honey, fruits, oil, and wine.

West Turkey, a few cereals, cattle, skins, and wool. A little valonia is shipped from Prevesa.

Volo, cereals, cotton, silk, and tobacco.

Crossing to *Egypt*, we get our largest shipments, in this area, of cotton and cotton-seed: also, beans, dates, dari, feathers, grain, and flour; senna, some coffee and rice, hemp, millet, gums, sugar, melons, and maize. Cotton and cotton seed are the *staples*.

Agriculture is practically restricted to the inundated parts.

Tripoli has no streams; it exports cattle, barley, dates, henna, madder, oil, wheat, ivory, ostrich feathers, pepper, wool, and esparto grass.

Some sponges, bones, and fruit from Susa and Sfax.

Tunis produces cereals, dates, esparto, fibres, hides, leather, olive oil, wool and sponges; and also exports manufactured silk and woollen stuffs, shawls, carpets, mantles, fez caps, otto of roses, and jessamine.

Algeria is very fertile, and yields cereals, fruit, esparto grass, olive oil, silk, tobacco, fez caps, and woollen manufactures.

Morocco produces almonds, beans, dates, gums, hides, oranges, fez caps, seeds, wool, and wax, with maize and beans as staples.

English goods.—Coal to the great coaling stations of Gibraltar, Malta, and Port Said.

Coal, fuel, and manufactures to Marseilles and all other transit ports.

Transit.—By rail to Marseilles, Turin, Venice, and Brindisi. By steam, Marseilles to Africa coast and Syrian ports. Also from Trieste and Brindisi to Alexandria.

London to Marseilles by rail 819 miles, and 28 hours.

By sea from London to Gibraltar, 1325 miles; Marseilles, 2050; Malta, 2315; Alexandria, 3102; and Athens, 2710 miles.

Marseilles to Algiers is 520 miles.

Centres.—Marseilles, the chief port of France, is an important mail station, and the centre of a large coasting and Mediterranean trade, besides extensive long voyage employments. Several large mail companies make this port their head-quarters and starting point, the trade with Algeria and Alexandria being especially large.

It is an extensive emporium for fruits, silks, wines and all French products and manufactures; as also ground nuts, kernels, &c., from the Mozambique channel and West Coast of Africa; English coal, coke, patent fuel, and general goods. It possesses extensive warehouses, and has every commercial and shipping appliance.

Shipbuilding is carried on. The harbour is one of the finest in France. It manufactures chemical products, textiles, olive oil, &c., shipchandlery, marine stores and oilcake very largely, which it exports in considerable quantities to England. As an emporium it takes the highest rank.

Barcelona.—The chief Spanish port and centre of general produce: receives large quantities of English coal and other commodities, United States cotton, Baltic timber and other products. It is the outlet for Catalonian woollens, &c., and the well-known Barcelona nuts. Itself manufactures beautiful lace, silk, and other textiles, shoes, leather, &c. It is a loading port, several cargoes of fruits, wine, &c., are obtainable. Its chief trade, however, is *transit.*

Genoa, the centre of Italian "coal import." Its position with all its railways gives it excellent facility for distributing this commodity; it has special adaptability for rapid discharge from the vessels.

It loads no *full* cargoes out, but is a place of call for coasting steamers, supplying them with the neighbouring products of cereals, rice, fruits, &c., and its own well-known manufactures of damask, silks, velvets and perfumes, other textiles and "bijouterie." It is admirably placed to prosecute a large and increasing transit trade.

Naples, a port of call, is the centre of Mid-Italian trade; it is beautifully situated, and, like Genoa, receives a large amount of English coal, patent fuel, and general goods: is not classed as a "loading port," yet contributes to the coasting steamers its marbles, alum, fruits and other produce, which all pass through it. Its manufactures of maccaroni, vermicelli, perfumes, silk and other textiles are well known.

Ancona, the most important east coast Italian port situated on the Adriatic, on the main line of railway to Brindisi, ranks high as an import station for English coal. The mail steamers from the Head of the Adriatic to

Alexandria call here. Its importance as a large transit emporium is without question. Considerable quantities of English goods find their way into Austria through Ancona; it is also an entrepôt for goods between Europe, the Levant, and the East. It has practically no manufactures.

Palermo, the centre of Sicilian trade, has unrivalled harbour accommodation; it ranks as a loading port, sending whole cargoes of sulphur to the Baltic (Cronstadt mainly), Oporto, &c., and, during the season, fruit to the United States and England. It has manufactures of cottons, leather, silks, gloves, &c., and is a large emporium for the produce of the interior. Palermo absorbs several hundred tons of English coal.

Trieste.—This is the chief Austrian port, situated at the head of the Adriatic, and is becoming a very extensive entrepôt. The trade is very large, quantities of flour passing through for shipment (and from Fiume) to Rio and other Brazilian ports; and wood (staves principally) to Alexandria.

Trieste is the headquarters of the mail steamers running down the Adriatic. There is a very extensive trade done with the Levant and other Mediterranean ports, with through goods from Central Europe.

As an entrepôt and emporium, Trieste ranks high, receiving Austrian, European, and English goods for shipment. British goods do not often go out by *direct* steamer. As a grain-exporting port, Trieste will probably soon take a high place.

There is some shipbuilding, and manufactures of morocco leather, marine stores, &c., are carried on; but its chief occupation is transit.

Alexandria is a most important centre, an "in and out" port; a mail station on the direct "overland route" to India and the East. It receives coal largely from England for the railways, &c., and wood from Trieste; return cargoes can always be obtained. It is the emporium of Egyptian produce; further, has an extensive coasting trade with Syria and the Levant. It is admirably situated for transit, having rail to Cairo and Suez, and canal communication with the Nile. It has vast warehouses and an excellent harbour. As an emporium it receives the riches of Central Africa, the cereals, &c., of the Nile and Nubia, with English commodities. It has no manufactures, this large trade being entirely shipping and transit.

MEXICO AND CENTRAL AMERICA.

Area 1.

This trade is geographically divided as Mexico, Central America, and the Isthmus of Panama. Here we approach one of the richest countries in the world, both for mineral and vegetable products; but the characteristics of the people have been unfavourable to the development of its natural resources, which may be regarded as virtually untouched. Difficulties of transit, occasioned by the ruggedness of the country, are in course of removal, not by native Mexican, but Anglo-Saxon energy.

Foremost in rank of constructive works in progress is the Panama Canal, the completion of which must influence this important region, by the vast diversion which may accrue of the world's traffic, and the impulse thereby imparted to native industry and interchange.

Railways, Communications, etc.—During the last few years (from 1878 to 1885) railway enterprise has been extensive in Mexico, for whereas in the former year only some 300 miles of rail were laid, this has now been increased tenfold. There is a direct *central* communication with New York and all parts of the United States from Vera Cruz and

Mexico *viâ* Chihuahua and El Paso del Norte (see map of "American Thoroughfares"). The *eastern* part of Mexico is entered from the "States" at Laredo on the Rio Grande, giving communication with New Orleans and the south; and, on the *west*, Guaymas joins the main States lines through Los Angales. More extensions are under construction.

The rivers of Mexico serve many towns. The Rio Grande del Norte, dividing Mexico from Texas, waters various inland towns as far as El Paso del Norte, the most northern city of Mexico, and Chihuahua, a town among the mountains in the north-west. Good roads traverse the country in all directions.

Central America has but few railways, and these chiefly from the coast to inland centres; the five states comprising Central America possess under 400 miles of railway altogether (in 1886). As the land continually narrows, the towns are situated not far from the one sea coast or the other.

The canal through the Isthmus of Panama, is intended to extend from Colon to Panama, uniting the Gulf of Mexico with the Pacific Ocean. Thus these two towns are destined to become both depôts of supplies for the whole region around and also great emporiums for transit goods. The weary and perilous passage round the "Horn" will be avoided, and the Panama Canal is expected to become one of the chief shipping highways from East to West.

Ports.—On the east coast of Mexico: Matamoros (Rio Grande del Norte), Tampico, Tuxpan, Vera Cruz, Alvarado, Minatitlan, Tabasco, Laguna de Terminos (Carmen), Campeachy, Sisal Progresso, with rail to Merida.

On the west coast: Santa Rosalia and Santa Maria, new ports in the Gulf of California, where a large trade is springing up among the mines, &c., and vast quantities of coke and some coal are being sent out from England: this trade is generally absorbed by the French. Guaymas, Port Colorado, Mazatlan, St. Blas, Port Navidad, Manzanillo, Acapulco, Tuxtepec (Jamiltepec), and Tehantepec.

On the west coast of Central America are Istapal, Sonsonate, Libertad, San Miguel, La Union, Realejo, San Juan del Sur, Nicoya, Montijo, and Panama.

And on the east coast Bacalar, Belize, Port Caballo, Truxillo, Bluefields, Grey Town (Nicaragua), Chagres, Colon (Aspinwall), and Porto Bello.

Towns.—There are many large towns well situated for transit trade. Among these we notice the following: Ures, in Sonora; Chihuahua and Santa Rosalia, in Chihuahua; Saltillo, in Coahuila; Monterey, in Nuevo Leon; Victoria, in Tamaulipas; Culiacan and Sinaloa, in Sinaloa; Durango, in province of same name; Guadalajara and Lagos, in Jalisco; Zacatecas, in Zacatecas; San Luis Potosi, in province of same name; Guanajuato, Queretaro, and Colima, all in provinces of the same names; Valladolid, in Michoacan; Mexico; Tixtlan, in Guerrero; Oajaco, in same name; Ciudad Real, in Chiapas; Tabasco, in Tabasco; Jalapa, in Vera Cruz; La Puebla, in same name; Ixmiquilpan, in Hidalgo; and Aguas Calientes, in province of same name.

Guatemala; Comayagua, in Honduras; San Salvador, Managua, Nicaragua, St. Jose, Santiago de Veragua, in Central America, with many others.

Minerals.—Mexico possesses great stores of copper, gold, and silver, with coal, iron, lead, tin, quicksilver, and petroleum. The province of *Sonora* has mines yielding copper, gold, lead and silver.

Sinoloa yields the precious metals. *Chihuahua* is sterile, but abounds in copper, gold, iron, saltpetre, tin and other minerals; silver is a specialty.

Durango produces gold, silver, and iron: and throughout Mexico are found the richest mines of silver, with copper, gold, and iron. There are famous *quicksilver* mines in Sonora.

Guatemala is wholly agricultural, and not worked for minerals.

Honduras produces asbestos, cinnabar, copper, emeralds, gold, lead and silver. *Nicaragua*, as also *British Honduras* and *Salvador*, are enriched by stores of copper and iron, while *Costa Rica*, as its name indicates, has abundant sources of mineral wealth, which the natives forego for agriculture.

The Isthmus of Panama.—A direct result of the interest excited by the inter-oceanic canal, may be seen in the attention already attracted to the metalliferous treasures of the Isthmus.

Central America also provides marble, stone, zinc and other mineral products.

Agriculture, etc.—The soil of *Sonora* is fertile, producing two crops a year, and yields beans, corn, maize, pease, sugar, and tobacco. *Sinaloa* yields excellent crops of Indian corn, sugar, and wheat. *Chihuahua* is sterile, but some trade is done in cacao, furs, and skins.

Some parts of *Durango* produce abundant cereals, rice, and tobacco, also manufactures cotton and leather. *San Luis Potosi* has agricultural produce in abundance, barley, wheat, &c., and cattle; manufacturing excellent cotton and woollen fabrics.

Vera Cruz is very productive, and yields cereals, coffee, cotton, dye, and ornamental woods, fruits, sarsaparilla, sugar, tobacco, and vanilla.

Oajaca produces cochineal, cotton, cocoa, fruits, honey, indigo, sugar, and wheat.

The export produce of Mexico beyond the above may be mentioned as, aloes, brandy and wine, bones, cotton and wool tissues, cocoa, caoutchouc, cochineal, chillie pepper, drugs, flour, flax, fruits, hides, india-rubber, jalap, lace, molasses, maize, pimento, plumbago, pulse, rum, sisal hemp, sugar, tallow, vanilla, wool, wax, with ornamental and useful woods.

In *Central America*, Guatemala produces in great abundance cotton, coffee, cochineal, cacao, caoutchouc, fruits, hides, indigo, india-rubber, maize, rice, sugar, sarsaparilla, wax, and fine woods; also wool and manufactured ponchos.

Belize and *British Honduras* grow the most magnificent forests, yielding cedar, mahogany, logwood, and all furniture woods: also fustic; and produce arrowroot, cereals, coffee, cotton, fruits, manioc, indigo, india-rubber, rice, sugar, sarsaparilla, and tobacco. *San Salvador* yields balsam of Peru, and indigo extensively.

Costa Rica gives in abundance coffee, cacao, caoutchouc, Indian corn, sugar, tobacco, sarsaparilla, tortoise-shell; fruits and all dye and furniture woods; also pearls.

Nicaragua produces coffee, cacao, cotton, cereals, fruits, indigo; Brazil woods; cattle and hides; while *Panama* has an abundant yield of all tropical produce.

Other exports are cochineal, deer-skins, india-rubber, limewood, molasses, medicinal herbs, rum, rice, rosewood, sarsaparilla, and tobacco.

English goods.—Coal is now largely introduced to Colon, Chagres, also Vera Cruz, and Belize.

English manufactures find their way to the inland towns from the ports of Vera Cruz, Belize, Grey Town, and Colon.

Transit is by mail steamer. The distance by sea from London to Chagres is 4990 miles; across the isthmus to Panama is 47 miles by rail; while by sea round the Horn, the distance is 11,350 miles.

Centre.—*Vera Cruz* is the port of the city of Mexico, and the centre of this trade: is a mail station, and imports some English coal and considerable general merchandise for distribution throughout Mexico and Central America. The canal works at Colon are at this time (1886–7) attracting large quantities of English material, and are, in consequence, developing more work than at Vera Cruz.

The trade of this port is solely *transit* and shipping, the merchants preferring to live on the hills inland rather than on the unhealthy marsh of the seashore. It boasts no local manufactures.

NORTH AND CENTRAL ASIA.

North and Central Asia geographically described includes Siberia and Turkestan,—in other words, it means all Asia, bounded by the Chinese Empire, Thibet, Hindostan, Afghanistan, Persia, the Caspian Sea, and Ural Mountains.

This trade is but little known in ordinary commerce. The Chinese Empire occupies practically the whole of Central Asia, bounding Thibet on the north, Tartary on the east, Siberia on the south, and including all Mongolia.

The eastern and north-eastern parts of Asia will eventually have transit either through Thibet to India, or through Tartary to the Persian Gulf, or Black Sea *viâ* the Caspian, or to Russia. Facility of transit will determine the route.

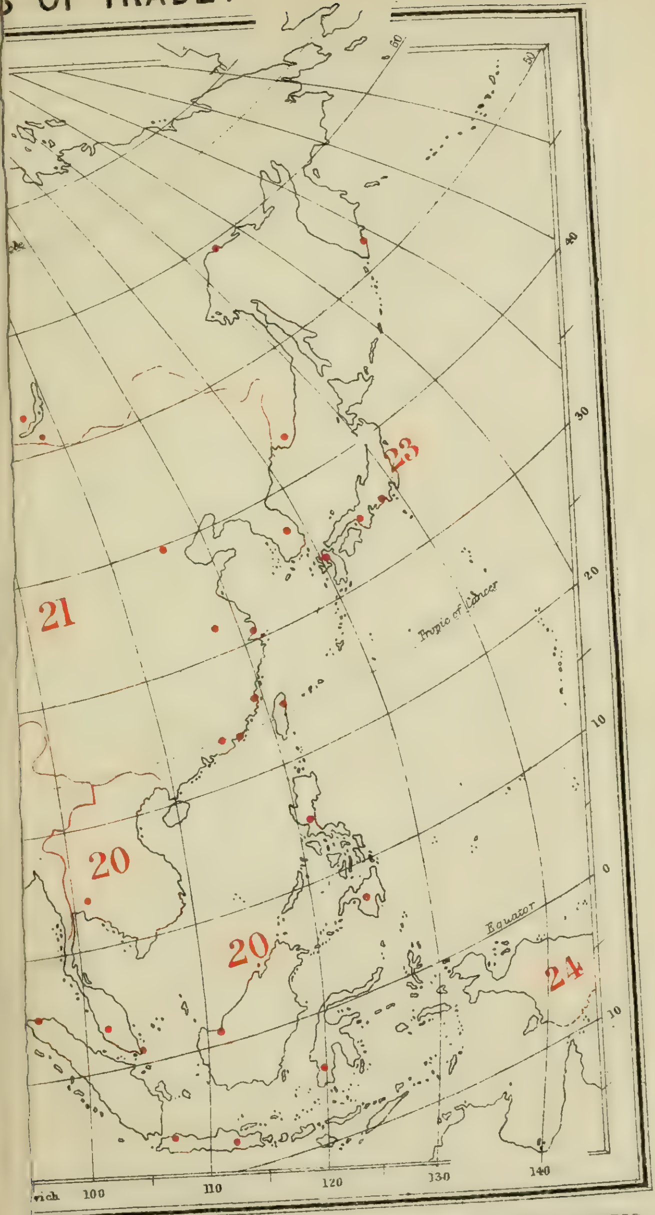
We can, therefore, only discuss Siberia, with its seaboard from the Sea of Japan to Kamtschatka, and Tartary on the Caspian.

Siberia is generally associated with Russia and its salt mines, as a region suffering the extreme rigour of climate. It is, however, for the most part a grand country and well watered; although its fine rivers, having their mouths in the Arctic Ocean, are blocked with ice, which arrests in a great measure, and apparently without remedy, agricultural pursuits and ordinary means of communication. During winter, ice transit is necessarily resorted to.

Siberian trade staples are furs and metals.

Railways, *Communication*, *etc.*—There are as yet no rail-

OF TRADE.



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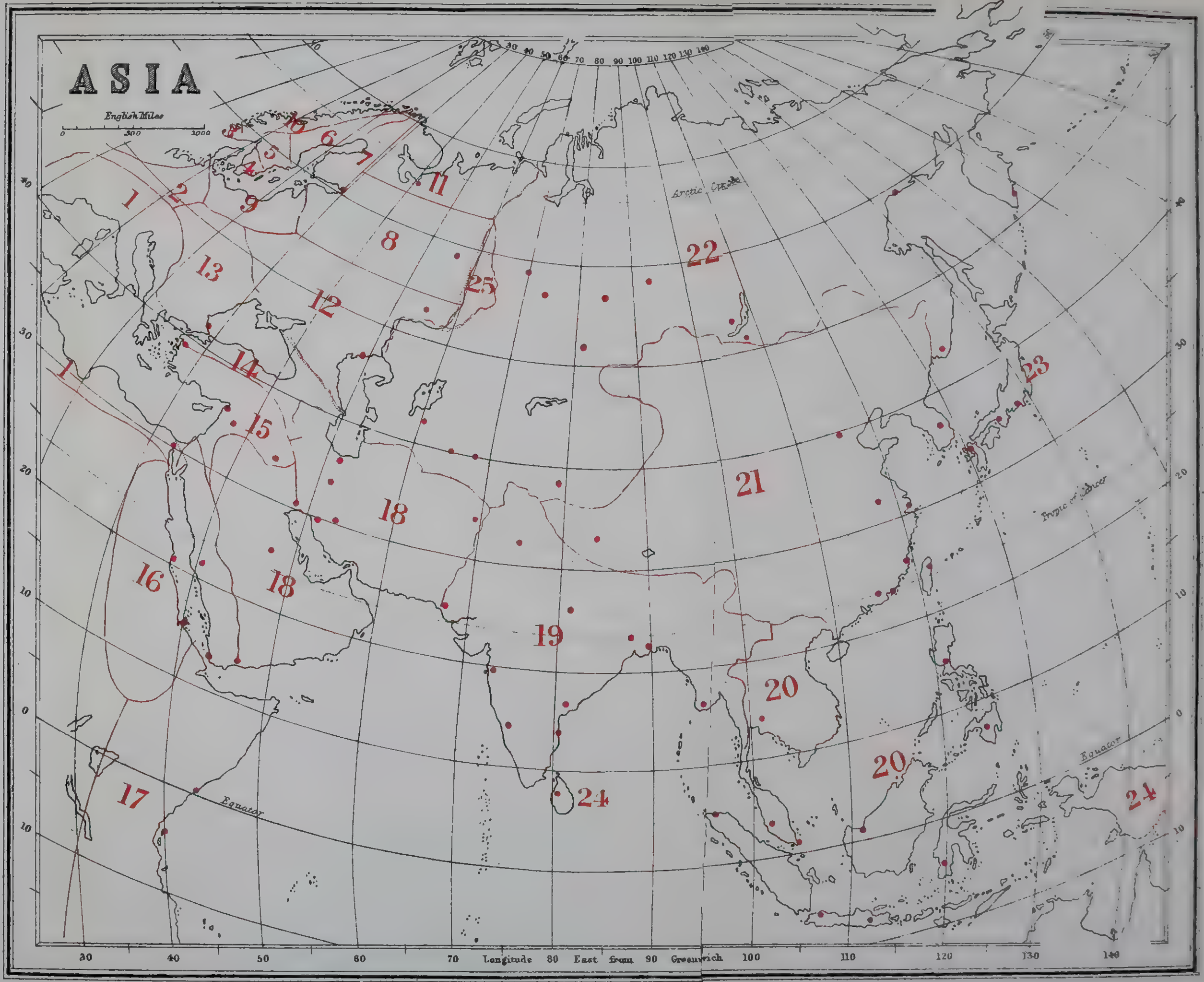
THE NATURAL DIVISIONS OF TRADE.

REFERENCE TO NUMBERS.

No. 1. Mediterranean Trade (North and South Shores).
,, 2. General Trade.
,, 3—9. Baltic ,,
,, 10. Norwegian ,,
,, 11. White Sea ,,
,, 12—14. Black Sea Trade.
,, 15. Levant ,,
,, 16. Red Sea ,,
,, 17. East African ,,
,, 18. Persian Gulf ,,
,, 19. Indian ,,
,, 20. Strait and East Indian Trade.
,, 21. China Trade.
,, 22. Northern and Central Asian Trade.
,, 23. Japanese Trade.
,, 24. Island ,,
,, 25. Intermediate Zone, with outlet either in Europe or Asia.



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way lines in Siberia, although materials are being accumulated at Vladivostock and Novgorodski, on the eastern seashore, for their construction. Ekaterineburg and Perm have lately been connected by rail. Extension is being pushed to Tuimen on a branch of the Obi, whence steamers ply to Tobolsk, Tomsk, Barnaol, and Semipolatinsk. Tartary (or Turkestan) has a line from Merv to the Oxus, with projection to Samarcand. This line is complete from Merv to the Caspian. The main *caravan* routes run from the Caspian at Mangyslak to Khiva and Bokhara, there joining the road from Orenburg. This is the main route to China *viâ* (from Bokhara) Samarcand, Khojend, Kashgar, Yarkand,—from here branching to Khotan, in Thibet, on the one hand; or descending from Khojend to Balkh, Cabul, and India, on the other,—Karashahr, Aksu, Kuldja, Sotchou, Lanchou, Kou-kou, Kalgan, and Pekin. Pekin again is in direct line with Tobolsk, *viâ* Urkutsk—with branch direct to Yakutsk—Tomsk, Omsk, and Tobolsk. From Tomsk, south to Barnaol and Semipolatinsk. Tobolsk has a direct communication true west with Perm, and south to Tashkend and Khojend, through Petropaulovsk, and thence as before to India. The rivers are the Obi, Yenesei, and Lena, all flowing north; and the Amoor, in the east, flowing into the Sea of Okhotsk. In Tartary, the Amoo Daria or Oxus, navigable for steamers, and flowing into the Sea of Aral.

Ports.—Novgorodski, Vladivostok, Alexandrovsk, Nicolaievsk, Aian, Okhotsk, Petropaulovski, and Kamtschatka.

Towns.—These are all named above, except Yeniseisk, Krasnoiarsk, and others smaller. Khiva in Turkestan.

Minerals.—Siberia possesses asbestos, antimony, argentiferous lead, copper, gold, ivory derived from fossils, which enters somewhat largely into commerce, iron, lead, platinum, silver, salt, tin, talc, and zinc, with the most massive deposits of graphite or plumbago in the world, and large quantities of salt.

The metalliferous beds are chiefly placed on the Asiatic slope of the Urals, the produce entering the Baltic or Black Sea area of trade by passes over this low range of mountains; and among the defiles of the Altai hills.

Before the notable discoveries of Californian and Australian gold within the present age, the Urals were the chief resources of Europe for this metal, and nearly the whole resource for platinum.

Celebrated emerald and topaz mines, jasper, lapis-lazuli, porphyry, diamonds, malachite, and mica. Jasper quarries near Koryvan. Quicksilver and lead mines near Nertchinsk.

These have to be transported by the caravan routes, or the winter sleigh service.

Tartary yields alum, coal, gold, salt, sulphur, asbestos, agate, copper, nitre, and sal ammoniac. But its most important product is jasper, in the extreme east (Yarkand, &c.)

These find their way into commercial life by routes as above.

Agriculture, etc.—Siberia is decidedly bare of agriculture. It is cultivated only between lat. 54° and 60°, the rest is "Tundra," a kind of prairie grass. On the river banks are cultivated barley, oats, and rye; while on the east coast all European cereals are grown. Fishing is an important item.

The most valuable produce is furs, with skins, hides, leather, &c. There is a large transit trade also in caviare, fish, cattle, and Chinese produce.

Manufactures are not of much importance. Tobolsk apparently is the chief trade centre, but it is *entirely* transit and barter.

All Chinese goods and those from Mongolia, which constitute a very large trade, go into Russia *viâ* the Siberian caravan routes, Tobolsk being the entrepôt.

Petropaulovski is noted for its exports of dried fish and furs.

Tartary, in contrast, is far more fertile, and produces cotton, cereals, flax, hemp, millet, pulse, rice, sesamum, tobacco; dye plants, fine fruits, mulberry trees, and some silk. Cattle and horse rearing is an important item.

The produce of this region is the mainstay of a large transit trade by caravan and river.

Wine is also made, and tobacco cultivated; furs and swan's-down come from the North.

Cotton, madder, and all the above, with every fruit, are cultivated round Khiva. Goats' hair is exported into India.

Manufactures are insignificant, being chiefly leather-work.

Goods are sent to these districts "in transitu," and bartered, by local merchants, there being no *direct* commercial intercourse with the United Kingdom.

Transit.—Into Siberia *viâ* Orenburg or Perm, and to Turkestan, *viâ* Orenburg or the Caspian.

Perm to Tobolsk is about 490 miles, and Orenburg to Bokhara between 1000 and 1100 miles.

Centres.—*Tobolsk* has long been a central emporium of Siberian trade, its position is favourable for its vast transit business. Situated on the Irkutsch, which during the short summer is a busy scene of river life, and at a converging point on the caravan routes between China, Mongolia, and Russia, also Tartary, Thibet, and the South, it enjoys a large share of the transit trade which ebbs and flows along these courses. The marts of Tobolsk are filled with European and Chinese goods.

Its local manufactures of leather work, furs and other clothing, candles, &c., are of little commercial worth.

Tobolsk has been renowned for years as a vast emporium and as the centre of Siberian trade.

Yarkand is said now to be the most important emporium for transit between China and the West (*viâ* Turkestan). The caravan routes passing through this centre.

Kiatcha is the *border* station.

PERSIAN GULF.

This Natural Division of trade may be subdivided into two "map areas" for clearer reference: 1. Including the shores of Arabia east of Aden up the Persian Gulf to Bussorah, and the country inland lying to the east of an imaginary line drawn from Aden to 32° N. lat. and 37° E. long.: and 2. Persia, Mesopotamia (Koordistan), bounded by the "Levant Trade," South Caspian, W. Afghanistan, and Beloochistan.

After leaving Aden, and proceeding towards the Persian Gulf, the country inland, beyond a few miles, seems a sterile waste.

Commercially speaking, there are no "ports;" the only places of some little importance are Terim, at the end of the caravan route from the Euphrates, not far from Makallah; Shehr, Misenat, and Sihut on the coast.

Makallah is the chief depôt of this district, and is frequented by coasting vessels, which proceed thence to the larger ports. A good deal of business is done in the slave market.

At Shehr there are a few manufactories for fire-arms, coarse woollen cloths, and gunpowder, also a trade with India, Persia, and Africa.

Sihut has a lucrative trade in carrying grain on the coast.

At the entrance of the Persian Gulf and on the shores of the Sea of Oman, are the seaport towns of Muskat, Burka, Suweik, and Sohar, the latter on the caravan route to Bussorah, by the coast, and the former at the termination of the route,—in a nearly straight line across the Continent,—from Mecca.

Oman is fertile near the coast, and produces, with exports to Persia and Africa, cloth, dates, dried fish, fruits, grain, matting, pearls, and salt.

The pearl fishery on the Bank of Oman is very valuable, and a large trade is done.

Muscat is a place of great commercial importance, its fine harbour at the entrance of the Persian Gulf being of great utility to shipping. It has essentially a fishing and seafaring population.

There is considerable local trade in Sohar, produce going up the Gulf.

With regard to other Arabian ports on the Persian Gulf, notably El Katif, a caravan entrepôt, and Grane, not far from Bussorah, little need be said; it is an insalubrious coast, and the trade is limited to fruits, rice, &c., which find their way to Bussorah, Persia, and the interior of Arabia.

In speaking of the Persian Gulf, in the first instance notice must be taken of the islands in the south, at the entrance of the Gulf, situated on the great pearl bank, notable for their valuable pearl fisheries.

About half way up the Gulf are the Bahrein Islands, densely populated, although forbidding in appearance; the centre of the great Persian Gulf pearl fisheries, and a very large trade is done, the islands produce dates, tropical fruits, barley, and wheat, which go into Persia.

The term "Persian Gulf Trade" is commercially applied to the shipping at Bussorah and Bushire, the only two important shipping ports in the gulf (we except the Arabian side for reasons stated, also Gomberoon, at the entrance of the gulf, which has a trade in fish, salt, and sulphur, but these all go to Muscat).

In former days, merchants at home were satisfied with mails few and far between, and with produce arriving by sail at uncertain times. Steam introduced the system of punctuality of arrivals of produce to market at stipulated times. Every possible means was devised to shorten the sea passage. To this end the Suez Canal was constructed. Now the delay in going through the Canal has grown vexatious, though only *hours* are lost, when formerly *days* did not matter, and a quicker route by an Euphrates railway presses upon commercial states as a more expeditious means of intercourse between the East and the West.

The rivers Euphrates and Tigris, with their tributaries, give an unexceptional highway to the sea; the caravan routes, also, are numerous and in all directions, making this area the emporium of the old world, for it stands midway between the East and West. At present, the sea voyage necessitates a circuitous route through the Suez Canal.

The produce of this region is among the most costly introduced into our markets.

The whole of the tabulated list of produce under Levant, is in force here: it is only a question of *outlet.*

Railways, etc.—Although railway enterprise has been moving in Persia, no line has yet been opened.

The whole transit is by the caravan routes, except where the rivers assist, and these arebut two, the Euphrates and Tigris with their tributaries. The roads, on the whole, are bad.

Ports.—Bussorah on the Euphrates, and Bushire on the Gulf.

Towns.—In Persia, and connected by caravan route with the rivers or ports, are—Zingan, Teheran, Reshd, Lahijan, Hamadan, Asterabad, Kermanshah, Nehavend, Sultanabad, Shushter, Kashan, Ispahan, Esfardian, Bebehan, Yezd, Rizal, Kerman, Shiraz, Meshed, Shirvan and Firozabad, Jaroom, Niriz, Darab, and Bunder Abbas or Gumberoon;

in the Turkish dominion, Killah (Babylon), Rakkah, near Aleppo, and on the Euphrates Bagdad, and Mosul on the Tigris. There are no other "towns" now in this once fertile valley.

Minerals.—The most celebrated are the turquoise, found principally in the north-east, and well developed. There are also antimony, argentiferous lead, copper and iron, but not vigorously worked. Rock salt and sulphur are very abundant in all parts. Naphtha is common in many places.

The province of *Azerbijan* produces copper, iron, lead, salt, sulphur, fine marble, and, it is believed, coal; *Faristan*, bitumen, salt, and sulphur; *Kerman* yields copper, gold, iron, salt, and sulphur. *Mesopotamia* yields no economic minerals.

Agriculture, Produce, etc.—Silk is the staple product of Persia. Cotton, opium, and tobacco-growing are very important industries. Manufactures of silk with gorgeous colours are noted, as also dyes, brocade, and embroidery.

The province of *Azerbijan* is very prolific. It is the granary of Persia, and, where proper irrigation is carried on, produces in abundance barley, cotton, dried fruits, dates, flax, grapes, hemp, honey, maize, madder, tobacco, wax, and wool; also cattle-rearing.

The district of *Irakajemi* is fruitful, and can be made more so by further irrigation; it yields cotton, fruits (peaches and figs), maize, opium, rice, rye, sesame, saffron, silk, tobacco, and wheat.

Farsistan, cereals, cotton, cochineal, fruit, oils, otto of roses, silk, tobacco, and wine, all of the finest quality.

The vines and wines of Shiraz are very celebrated.

Mazanderan province yields cereals, cotton, fruit, mulberry trees, rice, pomegranates, and sugar-cane, all in the greatest profusion.

Kerman is fruitful in barley, cattle, dates, grapes, gum, maize, oats, and otto of roses; hair, skins, silk, and wool.

Koordistan yields cereals, cotton, dates, fine timber, flax, fruits, hemp, indigo, mulberry, rice, sugar, and tobacco.

The Pashalic of *Bagdad* produces barley, cotton, flax, fruits, hemp, maize, rice, tobacco, and wheat.

The towns of this area are noted for their beautiful manufactures; the term "Persian carpets," shawls, &c., carries with it the idea of an expensive and elegant production.

The carpets and muskets of *Kermanshah* are well known. *Kerman* is noted for camel's-hair shawls, carpets, and muskets; *Yezd*, for cottons, coarse woollens, silk stuffs, velvets, and sweetmeats; and *Shiraz* for otto of roses. *Meshed* produces finest velvets, silk goods, sword-blades, and is renowned for its turquoise mines. *Hamadan* is noted for leather work; *Ispahan* for satins, velvets, glazed tiles, gold and silver work, and trinkets; noted also for stone and seal cutting. *Firozabad* is famed for the finest otto of roses. *Bagdad* has declined, but still manufactures red and yellow leather and plush coverlets; while *Mosul* is noted for muslins, chintz, and napkins. Other exports are raw and manufactured silks, assafœtida, amber, balsam, dyeing stuffs, dates, gall-nuts, madder, naphtha, opium, pearls, pearl shells, rosewater, sal-ammoniac, saffron, and tobacco. Opium, wheat, and shells come largely to England.

English goods of all sorts are introduced by the steam lines through Bussorah.

Transit is by regular steamer from London *viâ* the Suez Canal to Bussorah, 6645 miles, or Bushire, 6460 miles.

Afghanistan has an outlet either *viâ* Persia or Kurrachee. Its produce is conveyed by beasts of burden, principally camels. There are no roads for wheeled vehicles.

Its mineral resources are very great, but undeveloped.

It is fertile in parts, and yields two crops a year—one of barley, lentils, wheat, &c., and the second millet, rice, &c. It exports assofœtida largely, and has many medicinal plants.

Beloochistan has no port or place of commercial importance. Almonds and fruits are the chief agricultural products. It has some trade inland, the towns having their commercial exit at Kurrachee in Hindostan. Discoveries of petroleum wells are likely to largely assist in developing trade, as this product would furnish N. India with a supply of fuel much wanted.

The trade of Afghanistan and Beloochistan is largely transit between India, Tartary, and Persia.

Centres.—Bussorah and Bushire, both of which places enjoy a very considerable transit trade. Bushire receives as an entrepôt emporium Indian goods and British manufactures, and returns the wealth of Persia. The trade is an increasing one.

RED SEA TRADE.

The geographical area of the Trade embraces—1st, The Arabian coast bordering the Red Sea west of the Persian Gulf, bounded by an imaginary line drawn from 32° N. lat. and 37° E. long., and terminating at Aden; and 2nd, The western shores of the Red Sea to the Nile, embracing South Egypt, Nubia, and Abyssinia.

The trade, extending from the Suez Canal to Aden, is not of much commercial importance as regards imports and exports with England, but it is the highway to the East, and the traffic up and down the Red Sea is very large.

Hence the importance of Perim and Aden.

If commercial enterprise can be extended into Abyssinia, and a lucrative port be created on the sea, which may easily be, then the importance of the Red Sea, as a "trade," will be very largely increased.

As far as is known, the interior of Arabia is a mere sandy desert, and under present physical conditions seems precluded from any kind of commercial utility.

The mountain range running down the continent parallel with the sea, and about 60 miles distant, appears to present an insurmountable barrier to transit; but along this 60-mile margin dates are cultivated, the fruitfulness of which is dependent upon the proper irrigation of the soil, and this employs all the indolent Arab's ingenuity, and when all is done there is no surplus for export.

In the south, in Yemen, more favoured by climate and soil, very excellent coffee is grown, and is well known as "Mocha" coffee, although a good deal of so-called "Mocha" comes from fruitful Abyssinia, across the water.

In olden days, when the Arabs were the carriers of this part of the world, from the Euphrates and Syria to the Red Sea and Africa, the transit trade was very considerable; the caravan routes still exist and transit is yet partially carried on.

The port of Kosseir, on the African shore, is one end of the route from Africa and Cairo to Mecca, and Egyptian wheats, calicos, ivory, &c., are shipped to the latter place.

The great carrying trade of this part of the sea is the "pilgrim" trade, many thousands of these Mahometans taking their pilgrimage to Mecca *up* the Red Sea, and from North Africa and Syria *down* the sea, and from the Egyptian coast *across* the sea.

The small trade and manufactures will be described under their proper head.

The central point of business extension in the Red Sea seems to point to Abyssinia, where there is a large field open for enterprise, as can be seen by comparing the *abundance* of minerals and other produce with the *exports*.

Given good transit to the sea at Massowah, the riches of this tract seem unlimited.

Railways and communications.—There are no railways south of Suez, all transit depending upon the caravans and sea coast; there is a brisk coastwise movement with small Arabian sailing vessels.

Ports.—In the Red Sea, these are Suez, Yembo, Jeddah, Ghunfoodah, Loheia, Hodeida, Mocha, Aden, Perim, Massowah, Suakim, and Kosseir.

Towns.—In *Arabia*, Medina, a central station, with caravan line to Yembo, about 115 miles distant; also a caravan road to Jerusalem and the Euphrates.

Rabigh and Kholeis on the route Medina to Jeddah. Mecca, the capital, with port at Jeddah, and caravan routes to Jerusalem through Medina; to the Euphrates; and to Muscat and El Katif, through Riadth, an entrepôt on the Persian Gulf. Dezat Irk, 70 miles from Mecca, is a great caravan road junction.

Doka, near Ghunfoodah. Loheia, on the sea coast and caravan route. Sana, Doran, Damar and Hais in Yemen.

Then there is the important island and coaling station of Perim, and Aden, a trade centre.

In *Africa*, just south of Abyssinia, we have Hanfila and Tajura.

In *Abyssinia*, Adowa, Arum, Sokota, Antalo, Gondar, Magdala, and Gudera; all, except the last, which has transit by the Nile, have caravan communication with Massowah, the town of Ausa having an outlet at Tajura.

Suakim in Nubia is in caravan correspondence with Berber, Shendy and the Nile, Abu Karaz, Cassala and the country of Kordofan.

While in *Egypt*, Kosseir has a road to Koft on the Nile for Cairo.

Minerals.—Egypt, Arabia and Nubia, cannot boast of any mineral wealth.

But, in Abyssinia, coal, iron, salt and sulphur are to be worked, and a large trade may yet be done.

Agriculture, etc.—The date is chiefly cultivated. It is but little exported, being used for home consumption.

Arabia is famous for its horses, asses, mules, and cattle.

Coffee is the famed product. Millet is the only cereal much cultivated. Gums and drugs are export commodities.

The town of Hais is famous for its pottery. Lime is prepared near Loheia. Aden is an entrepôt receiving English and Indian goods on the one hand, and on the other, from the neighbouring countries, African dyes, calicoes, feathers, gum, and hides: Red Sea mother-o'-pearl: Zanzibar specie: Mauritius sugar: and Indian tobacco. It has no manufactures, if we except water and salt, which latter is now becoming so important that vessels can load this product as a freight instead of leaving in ballast.

Balsam, gum arabic, and a little ivory are exported.

There are no exports on the shores of Egypt and Nubia, the cereals, cotton seed, and other products of these countries going down the Nile to Alexandria, into the "Mediterranean Trade."

Abyssinia, on the other hand, is a mine of wealth: wheat of the finest description grows here; barley, maize, and millet also grow well. *Two* and even *three* harvests are obtainable in the year.

Cotton and flax will grow: grapes also, from which good wine can be made. Coffee, citrons, and all fruits thrive well.

Excellent timber is obtainable, also ivory, musk, gold dust, and some spices.

A "system" of trade introduced into this country would lead to immense results.

English goods, nearly entirely transit; coals largely to Suez, Perim, and Aden, which are great coaling stations.

Manufactures are sent to Aden and Perim.

Coal and general goods are now sent to Suakim, chiefly for distribution to our military.

Aden receives also considerable goods trans-shipped and otherwise, from Bombay.

Transit.—By steam *viâ* Suez Canal.

The distance by sea from London to Suez is 3380 miles; from Suez to Jeddah, 720; Perim, 1195; and Aden, 1315 miles. Jeddah to Mecca is 55 miles.

STRAITS TRADE.

The "Straits Settlements" comprise Singapore, Penang, and Malacca, with Prince Wellesley; and are situated in the Straits of Malacca—on the Malay Peninsula—and in considering this trade area we include, in addition to Malay, the East Indian Islands.

The grand commercial position of Singapore makes it the key to the immense traffic between East and West; for the *whole* shipping bound to and from China, Japan, and the Islands pass this port, which has risen into unrivalled prosperity in an almost unprecedented manner. Singapore—as an entrepôt—receives goods from all parts of the world; the shipping there covering the produce of other regions beyond its own immediate vicinity.

Singapore is a "free port." The Chinese, as a nation, refuse open trading, yet those away from China enter into commerce as other nations: there are many Chinese in Singapore, as well as in Assam, South America, and other business parts of the world.

Communications.—Entirely coastwise: produce reaches the sea by the roads and water-ways. Railways in all this division only reach a mileage of 590 miles.

Ports. — Singapore, Malacca, Penang; in *Sumatra*, Acheen, Padang, Bencoolen, Baniak, Palembang, and some smaller ports.

Java, Batavia, Samarang, Sourabaya, Cheribon, Anjer, &c. *Borneo*, Sarawak, Pontianak, Sukadana, Bruni, Pagattan, Coti, Passir, and others.

Celebes, Macassar, Kema, Menado, Gorontalo, Boni, &c.

Moluccas, Gilolo, Ternate, *Ceram*, *Amboina.*

Philippines, Manilla, Iloilo, and Zebu.

Banda Islands and in *Labuan Island*, Victoria Harbour.

Towns.—Of little commercial importance beyond the coast; chiefly *villages*, except in Borneo, where the two large rivers give internal communication, and here a few larger towns have sprung up.

Minerals.—Specialties, *Borneo*, tin; *Banca*, tin; *Java*, sulphur; *Labuan*, coal.

Precious metals and gold dust, also precious stones, pearls, &c., in practically all islands.

Coal not much worked: alum, amber, copper, iron, limestone, manganese, marble, and sulphur from the *Philippines.*

Iron and tin around *Singapore.*

Sumatra has basalt, copper, granite, petroleum, porphyry, sulphur, tin, &c. The chief industry in *Perak* is mining.

Asphalte, naphtha, salt, and sulphur are found in *Java. Borneo*, although not wholly explored, is known to yield antimony, copper, cinnabar, gold, iron, quicksilver, tin, zinc, and precious stones: it also possesses a promising pearl fishery.

Copper, iron, gold, salt, sulphur, and tin, with precious stones, in the Celebes; coal in Labuan. Hardly a better field in the world open for mining enterprise, and with better prospects.

Agriculture, etc.—Singapore imports from *Europe* and *North America* manufactures and miscellaneous goods; from *Calcutta* opium, sheep, saltpetre; from *China*, alum, cassia, camphor, gold, silver, sugar, silk, tea, and tobacco; from *Java*, birds'-nests, cottons, gambier, pepper, rice, tobacco, and treasure; from *Borneo*, unprepared sago, antimony, gutta-percha, rattans, &c. From *Celebes*, coffee, mother o' pearl, sandal, and other woods; from *Sumatra*, coffee, gum, gutta-percha, ivory, pepper, and sago.

From *Malay*, gutta-percha, rice, and tin; from *Australia*, horses; from *New South Wales*, coals; and from *West Australia*, sandal-wood.

This vast wealth of import business, coming into one depôt, is held simply for barter, and to be passed on, the annual transactions reaching an enormous magnitude.

And all this is *nature's* production; so that the same rule holds good here as throughout, that the uncultivated parts may yet be cultivated, and the parts under cultivation may be even more remunerative, by the use of modern appliances and modern knowledge.

The manufacturing staple of Singapore is the making of "pearl barley." Every piece of land throughout this area is of the highest possible fertility. The tea-plant has been introduced with considerable success.

As it will be impossible to particularise the produce of each island, we append a full list of East Indian produce, as known in London, and coming from the Straits, Siam, the Philippines, and East Indian Islands. Specialties are noted.

Arrack, betel-nut, beeswax, buffalo horns, antimony, arrowroot, alum, camphor, canes, cassia, cinnamon, cattle, cloves, cochineal, coffee, copper, cocoa, cubebs, cutch, cassava flour, copra, cowries, cardamoms, cordage from *Philippines*, cotton, cigars, drugs, dye-woods, dragon's-blood, dammar, ebony, essential oils, gambier, gums, ginger, gold-dust, gutta-percha, gram, gamboge, hides, horns, hemp, honey, india-rubber, elephants' teeth, fruits of all kinds, fish, fibre textiles, ivory, indigo, kapok, leather, mace, metals, maize, mother-o'-pearl, nutmegs, opium, oil, paddy, precious stones, rattans, rice, rum, sago, pearl sago from *Singapore*, sugar from *Java*, saltpetre, shells, sugar-candy, sapan and sandal wood, spices, stick lac, silver, tamarinds, tortoise-shells, tea, tin (*Singapore*), turmeric, tapioca, tallow, teak, tobacco, teel-seed, and yams.

Amboina is noted for cloves. The *Celebes* for pearl fisheries and "Macassar" oil; the *Moluccas* generally for the sago palm (used for starch), nutmegs, and spices. *Banda*, for nutmegs.

Manila for its cheroots, cigars; hemp, rice, sugar, and abaca cordage, called Manila hemp and rope; and for piñas.

Borneo for pearls, and *Singapore* for pearl sago. Tobacco, introduced into Borneo, promises to be a great success, and a large trade will probably develop in the near future.

English goods of every description to and through Singapore.

Transit, by mail steamer *viâ* the Suez Canal.

London to Acheen is 7700 miles; Anjer is 8270; Batavia, 8330; Manila, 9650; Penang, 7930; and Singapore, 8345 miles.

There seems still ample scope for a larger trade in the East Indies, not only in agricultural produce, but also in minerals, and especially coal. Borneo, and adjacent islands, have fine undeveloped coal-fields, as well as other valuable minerals.

STATES—AMERICAN TRADE.

The natural divisions of this trade are easily definable on any atlas, being the recognised geographical division of, 1st, British North America; and 2d, the United States, bounded on the Mexican frontier by the Rio Grande del Norte.

We have now to consider commercially an exceedingly large area, British North America, including Canada and Nova Scotia; also the United States, north and south, with their east and west coasts.

The divisions of this area correspond with the terms current in commerce. An owner, for instance, says that his vessel is engaged in the "States Trade," one's mind immediately goes to the produce of *all* the ports on the east coast and in the Gulf of Mexico. Or, say, the cotton trade, meaning all lower Southern ports; or, States grain, meaning New York, Philadelphia, or Baltimore; or, again, American timber trade, which bears with it all Canadian ports and also Southern States ports.

California and Oregon are added for convenience.

British North America, with Canada, is the land that supplies us mainly with timber, also with furs, fish, hides and skins; with the completion of the Canada-Pacific line, running from the east coast to Vancouver's, we hear of the very best land for wheat-growing, and of boundless pastures, which bid fair to nourish flocks of splendid sheep, and so run our Australian and Cape wool trade very closely.

This new line through British territory stands a fair chance of acquiring a large share of the Chinese and Japanese trade, since it secures a short cut to those countries, as well as to Australia and the Pacific Islands.

Apart from manufacturing exports, the United States may be divided for raw materials thus:—The *wheat country*, all the north down to the lat. of Baltimore, adding California; the *petroleum oil country*, between this territory and the *cotton* and *tobacco country*, which covers the south and south-west. Some grain is shipped from the cotton emporium, New Orleans; but this comes down from inland by the rivers, and New Orleans does not classify prominently as a cereal export town.

Railways, etc.—It will be impossible to *detail* the railway system; it is said there were 128,967 miles of working lines at the end of 1885. The great trunk lines are—Quebec to Vancouver's, through Canada; New York *viâ* Chicago to Portland (Oregon), North Pacific Railway; New York to San Francisco; New York to Denver, Santa Fé, and Mexico; New York to Galveston, also New Orleans and Florida;

and, lastly, San Francisco to the head of the Gulf of California, continued to Guaymas in Mexico. (See Map of "American Thoroughfares.")

Then there are the Mississippi and Missouri, two of the finest rivers on the globe, giving, practically, water transit to the whole of the United States.

Some of the other rivers are the St. Lawrence, the Colorado, Sacramento, Rio Grande del Norte, &c.

Ports.—The most important are Montreal, Quebec, Dalhousie, Miramichi, Richibucto, Shediac, Pictou, Sydney, C.B., Halifax, Louisburg, Yarmouth, Amherst, St. John's, Portland, Boston, New York, Philadelphia, Norfolk, Baltimore, Beaufort, Wilmington, Charleston, Savannah, Key West, Appalachicola, Pensacola, Mobile, New Orleans, Galveston, San Diego, Monterey, San Francisco, Portland (Oregon), Astoria, and Victoria in Vancouver's Island.

Towns.—Some of the largest and best known central towns in this vast area are—Ottowa, Oswego, Buffalo, Chicago, Yankton, Indianapolis, Annapolis, Richmond, Kansas City, Memphis, Austin, Sacramento, Salt Lake City, Jefferson City, Olympia, Cincinnati, Louisville, St. Louis, &c.

Minerals.—The gold fields of California, the vast coal resources of Cape Breton, Vancouver's Island, and Florida (Key West), are well known. There are large coal deposits in Nova Scotia, and in very many other parts, covering a space larger than the British Islands.

British North America is very rich in minerals, as may also be said of the United States; but the stores have barely been encroached upon.

The following minerals are known to exist:—Antimony, asbestos, coal, cobalt, copper, gold, gypsum, iron, limestone, marble, manganese, lead, plumbago, phosphates, silver, salt, sandstone, slate, tin and zinc. Cornelian and precious stones are found.

Petroleum is largely produced and shipped from Wilmington, &c., as also is pitch. Phosphates from Bull River.

Agriculture, etc.—Canada, Ontario, and Quebec are famed for their forests, and an immense business is done in timber.

Agriculture is making great headway both in dairy-farming, cattle-rearing, and ordinary farming. The lumber trade is the staple of Quebec. Nova Scotia yields large quantities of apples and vegetables. Halifax is a very extensive depôt. Manufactures are increasing.

Fishing is very important in all these districts.

Manitoba is very fertile, and is capable of producing cereals, flax, pulse, and good pasturage. The rivers are navigable. This, together with the "North-West Territories," affords one of the finest wheat-growing lands in the world, and facilities for sheep, cattle, and horse rearing.

New York, Philadelphia, and Baltimore export wheat, flour, and cereals largely. Chicago is a great flour emporium and an immense railway centre.

Cotton and tobacco are shipped largely from Virginia and Carolina ports.

Timber and deals from the Pensacola districts.

Cereals, and, especially, cotton from New Orleans, which is the cotton centre. Cotton also from Galveston, and wheat very largely from California, Oregon, and Astoria.

The United States now aim at many and varied manufactures. Several large towns have sprung up simply from transit position, as Chicago, &c.

Canadian cereals are barley, buckwheat, maize, oats, and wheat. Flax, hemp, and tobacco are successfully cultivated. Pot and pearl-ash manufactures are carried on extensively. Maple sugar is becoming an important industry. Furs are sent down from Hudson's Bay Territory.

In *South States*, all cereals, with maize, rice, and sugar, are cultivated. Flax thrives in Kentucky.

Carolina, Kentucky, Virginia and neighbouring States are world-renowned for tobacco, which is largely exported.

Other recognised exports are trans-shipped coffee, cocoa, pimento, flour, beef, pork, maize, mandioc, tallow, pickled fish, pitch, tar, turpentine, oak and other woods, naphtha, deals, slate, rice, flax seed, cereals, manufactures, coals and other minerals, ship-bread, wine, brandy, spirits, hides, salt, &c.

English goods, manufactures, machinery, &c., to all ports.

Transit, by mail steamers.

The distances are, London to Boston, 3030; Halifax, N.S., 2685; New York, 3245; New Orleans, 4690; Quebec, 2930; and San Francisco, 13,670 miles.

By rail Quebec to Vancouver's; New York to San Francisco, &c. See Map of "American Thoroughfares."

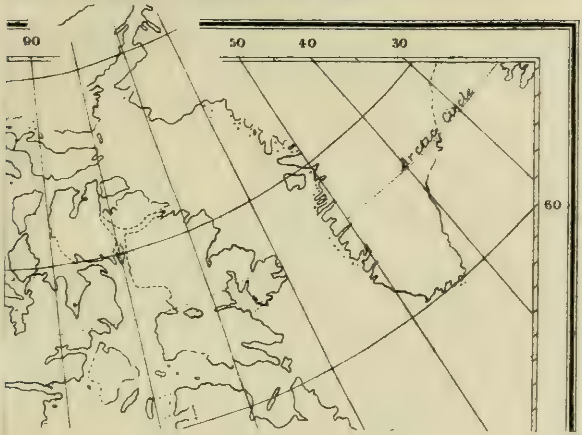
The Mississippi Valley is eminently fertile; inexhaustible lead mines in Missouri; quicksilver in Kentucky. California is coming out largely in wine production, also honey and sugar from its multiplicity of bees. Enormous quantities of salt throughout. Nitre is found in Kentucky, Tennessee, and Virginia.

Centre.—Quebec is the centre of the "Canadian Trade," which is restricted to the summer months for shipping purposes, the St. Lawrence being ice-bound during winter.

The internal and transit trade at Quebec is enormous; in providing for the new season's shipment, rafts of timber come down the stream until miles of wood are seen on the river banks: during winter they are sawn at the mills, and otherwise worked ready for the first ship's arrival.

Pot and pearl ash industry, with brewing, distilling, and tanning form important occupations for a large number of workers, but the chief trade is in timber, either in rafting or other river-work, sawing, carding or working up the wood or loading the vessels.

ISIONS OF TRADE.



THE NATURAL DIVISIONS OF TRADE.

REFERENCE TO NUMBERS.

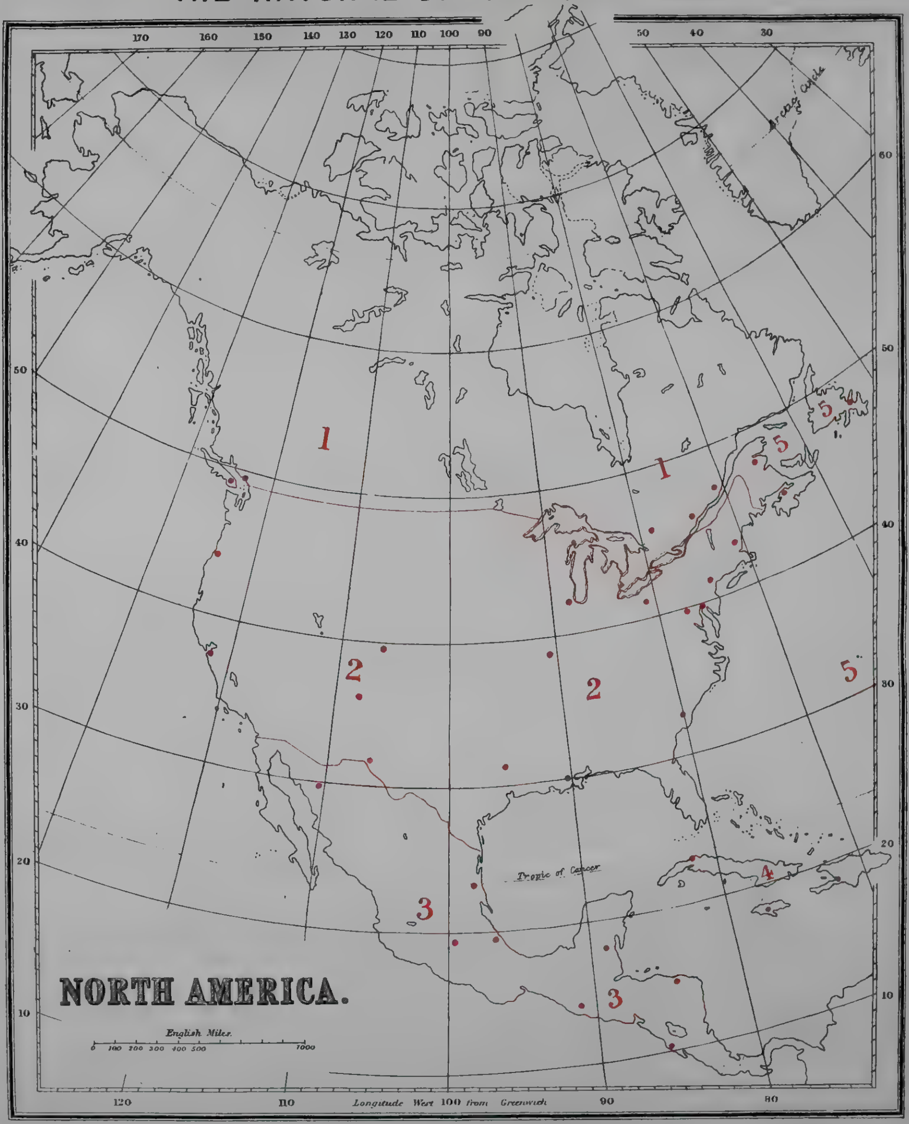
No. 1. North American and Canadian Trade, including the Vancouver Through Route, Manitoba, North-West Territory, Hudson's Bay, New Brunswick, &c.

,, 2. States Trade, including San Francisco (California) and Oregon.

,, 3. Mexican Trade, including Central America.

,, 4. West Indian Trade.

,, 5. Island ,,



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Textiles find a place among manufactures.

Agriculture, and as a result barley, oatmeal, flour and other mills occupy many: so that the St. Lawrence cities at all times present an active and prosperous aspect.

Centres.—The centres of trade in the *States* are New York, Philadelphia, Baltimore, and New Orleans.

New York is the chief business port and metropolis of the States, and stands unrivalled as an entrepôt. It is a most important mail station, and has direct shipping communication with England, the Continent, Mediterranean and the East. It is also the point of departure for the great Trunk lines across the American continent. It boasts a splendid harbour, and means of transit inland by rail and canal. By ordinary steamships New York receives iron, tinplates, ore from the Mediterranean, and returns full cargoes of grain, specie and general goods coming by the mail boats.

It manufactures machinery, has iron-foundries, sugar-refineries, breweries, &c., shipbuilding yards, and an immense local as well as transit trade. As an emporium New York ranks nearly as high as London.

Philadelphia stands next to New York as an emporium and in its transit trade: petroleum is a staple product passing through this port; it also consigns lard, bacon, and other provisions.

The trade is essentially *transit*, but Philadelphia has at home shipbuilding yards, ironworks, breweries, distilleries, tanneries, &c., and with its transit and shipping business enjoys a very extensive local trade.

Baltimore ranks *fourth:* this is the *flour* mart and *tobacco* emporium; has a large transit trade also in grain and provisions; imports ore from Cuba and the Mediterranean. Its local trades are textile manufacture, machinery-making, sugar-refining, &c., but its staple is tobacco, of which commodity it is said to boast the most extensive trade in the world; flour ranks next; but in all cases Baltimore is only the emporium, and holds the goods "in transitu."

New Orleans takes the *third* place in "the States" centres. This is the great *cotton* emporium, and owes its prosperity to its unrivalled position at the mouth of the Mississippi river. Its manufactures are insignificant, but its coasting and transit trade is enormous.

New York is the centre of the "*hop*" export, the universal *maize*, other cereals, and leather.

Boston for cotton, woollen and leather manufactures, and books.

SOUTH AMERICAN TRADE.

This title almost speaks for itself; but commercially there is a reservation, the west coast of the continent being classified as a distinct trade for guanos and nitrates, and called the "West Coast Trade."

We will lay down our natural division, or rather geographical area, thus—The continent of South America, divided by an imaginary line from the Isthmus of Panama to the frontier junction point of New Granada, Venezuela, and Brazil, thence south a few miles E. of the Andes to Cape Horn; the *Eastern* side of this line is "the South American trade," and the *Western* side "the West Coast trade."

The South American trade may be further subdivided as "the region of sugar, rum, and molasses" in the north; the "region of coffee" in the centre; and the "region of cattle, sheep, and horses" in the south, or La Plata.

Thus the term "South American trade" refers commercially to the maritime traffic on the *East* coast of this continent. The region is one of wondrous production, favoured by nature with splendid transit into the very heart of the country by means of the grandest system of continental rivers. The mountains (Andes) skirting the shores on the opposite, or west, coast of this continent preclude any real inland *water* communication on *that* coast.

The northern shores of South America partake of the climatic influences of the West Indies, and similar produce is the result through Venezuela, the Guianas, and Northern Brazil.

Considering Brazil, in the north there is the river Amazon, with a course leading right to the Andes, and serving an enormous tract of land. This river is navigable for about 2300 miles from its mouth.

In the south, and running at right angles with the Amazon, are the rivers Parana and Paraguay, uniting to form the "River Plate."

The variations of latitude are reflected in the resources of South America; for whereas sugar, rum, and molasses are the staple of the north, hides, wool, and tallow are the staple of the Plate.

The "pampas," or prairies covered with grass, afford unlimited grazing ground for multitudes of horses and cattle. These animals are so plentiful as to be purchasable in "the Plate" for a few shillings; in fact, thousands of horses, being useless for sale purposes, are slaughtered for their tallow and hides.

"Jerked" beef has for years been a staple of this district, but has not found favour in England.

The well-known "Extract of Meat" claims the banks of Uruguay River as one of the earliest starting-points of this industry.

The River Plate has been largely exporting frozen carcases of sheep and oxen, and having such a much shorter sea voyage to perform, has established a large trade in this commodity.

Uruguay is one of England's best customers.

Railways and Communications.—Railway enterprise has, practically, only just begun in South America. When the lines contemplated are complete, the already large trade of the continent will admit of indefinite expansion.

New Granada, Venezuela, and the Guianas are splendidly provided with water transit, and the necessity for railway communication has been less felt; although there are a few miles working.

New Granada is watered by the rivers Magdalena and Cauca, joining and providing the whole country from end to end with a waterway to the sea. These rivers being navigable leave little to be desired for transit service. On the eastern slope of the mountains, the few existing towns communicate by branches of the Orinoco and Amazon.

In Venezuela the Lago de Maracaybo penetrates so far into the district, that with the short streams therefrom, in conjunction with the Orinoco tributaries, ample water carriage is everywhere supplied.

The Guianas possess their several rivers Essequibo, Surinam, and smaller streams.

Further south, the Amazon and tributaries give communication with the sea, and, inland, throughout the districts of Para, Amazonas, Mataro, Grosso, and Goyaz, in which territory it meets the river Parana running south through the Plate.

The provinces of Maranhao and Piauhy are watered by the river Parnahiba. The river San Francisco flows through the lower districts of the River Plate.

It is not until we reach Pernambuco that we first encounter railways to any great extent.

A line is already started from Pernambuco, and one more extensive is being constructed along the San Francisco river, on the north shore to Bavista, there meeting a projected line on the south bank in a direct course to Bahia.

The total mileage of railways in the whole of Brazil only reaches to 4380 miles (1885–6).

The contrast between the paucity of railway communication in South America and the completeness of the railway system in North America, has its counterpart in the contrast of the magnitude of the internal trade of the two continents, —interchange being respectively proportionate to the means of transit.

In the province of Rio de Janeiro, there are a few branch lines and one main line into San Paulo. The total length is only about 800 miles; but it joins Rio and Santos, and opens up a rich country, with the result that in the last few years the trade of Santos has leapt upwards with a great bound. Further lines are being quickly pushed forward.

La Plata furnishes a salient example of rapid progress in industry and commerce from engineering enterprise applied to communications. The removal by scientific skill of difficulties impeding access to the Port of Buenos Ayres, begins, even before complete, to repay its cost, by increased trade.

A railway system, more perfect than in any other South American state, supplements the fine water-ways, by the rivers Parana, Paraguay, and Uruguay, with their tributaries.

As a result, the trade of this region without the natural and spontaneous productions of the northern districts of South America, is altogether eclipsing the northern port trades, whereas formerly the reverse was the case.

From Buenos Ayres there are already several lines working, and running into the country for some miles in all directions. While from Monte Video, a line runs 110 miles into the Uruguay Republic, with another in progress to Colonia,—opposite Buenos Ayres,—and to the Uruguay river. Here it will meet the river steamers running up the river to Rosario, whence there is a line running right across the continent to the mountains, in more than one direction, with contemplated termini at Mendoza, San Juan, Tinogasta,—close to Copiapo on the *west* coast. This line passes the towns of Villa de Mercedes on the one hand, and Tucuman in the north on the other.

As many of the valuable mines of Peru and Chili are situated in the Andes, railway communication from the vicinity of the mines on the *east* side of the mountains, will give an impetus to the Plate trade, practically cutting out the "West Coast," as it will save the time and risk of the voyage round the "Horn."

These railway enterprises further mean export of plant and accessories from England, with machinery and coals, thus leading to the growth of towns along the route, and consequent requirements for English commodities. The rapidity with which railway work over the whole continent is at this time being carried out, is an index to a rapidly increasing trade.

Patagonia has no communication between the seaboard and inland, beyond the rough roads.

Ports.—In *New Granada*, Cartagena, communicating with the river Magdalena by the Dique canal, Sabanilla, Sta. Marta, La Cienega, La Hacha, and some minor ports.

In *Venezuela*, Maracaibo, and smaller ports in the Bay, Coro, Tucacas, Cabello, La Guayra (Caracas), Barcelona, Cumana, Cariaco, Angostura, and S. Fernando up the Orinoco.

In *British Guiana*, George Town (Demerara), Berbice, and New Amsterdam.

In *Dutch Guiana*, Paramaribo.

In *French Guiana*, Cayenne.

In *Brazil*, Macapa, all ports up the Amazon to Manoas, Para, Maranhao (Alcantara), Parnahiba river, Aracaju, Ceara, Natal in Rio Grande do Norte, San Miguel, Parahiba, Pernambuco, Maceio, Villa Nova on River San Francisco, Sergipe del Rey, Bahia, Camamu, Contas, Porto Seguro, Caravellas, Porto Allegre, Victoria, Rio de Janeiro, Santos, Paranagua, Pto Alegre in Rio Grande do Sul, Monte Video *Up the Uruguay*, Ensenada, Fray Bentos, Concepcion, Paysandu, Concordia, with railway to Santa Rosa, and connection right up the Uruguay.

Up the Paraguay.—Campana, San Nicolas, Rosario, Parana, Santa Fé, Corrientes, and Asuncion (with rail to Villa Rica), Buenos Ayres, and Bahia Blanca.

Towns.—In a vast area like this, there are many towns that could be named, but for *all* reference must be made to a map.

We select a few of the most prominent; in *New Granada*, Mompox, Zaragoza, Pamplona, Remedios, Socorro, and Bogota; in *Venezuela*, Truxillo, Barinas, Achaguas, Arauca, Nutrias, Barquisimento, and Aragua.

British Guiana.—Cartabo; *French Guiana*, Oyapok.

In *Brazil.*—Santarem, St. Joao Barras, Oeiras, Caxias, Pernagua, Natividad, Matto Grosso, Goyaz, Sanquexuga, Ouro Preto, St. Paulo, Candelaria, Salta, Santiago, Catamarca, Cordova, Mendoza, and many others.

Minerals.—The province of *Antioquia*, in New Granada, yields gold and silver, with copper, iron, lead, quicksilver, sulphur, and tin, but little or not at all worked; there are important lime works in Borgaca; the province of *Magdalena* contains gold, but it is not worked; fine coal abounds round Bogota; platinum is also found.

There are silver and emerald mines, diamonds are also found. This province is one of those of immense mineral wealth, yet undeveloped.

Venezuela.—The Orinoco gold fields are the richest in the world; many of the towns owe their origin to their position near the mines; there is coal round Coro; asphalte, copper, petroleum, silver ore, tin mines, salt, and sesquicarbonate of soda, abound.

These valuable minerals are not worked as they should be.

The *Guianas*, *Maranhao*, and *Para* do not seem to possess any minerals, with the exception of the latter, which has to a small extent gold and precious stones.

Piauhi has alum, copperas, iron, and saltpetre.

Rio do Norte, a little gold, some precious stones, silver, and iron, quantities of granite, lime and sandstone, but these lie idle.

Pernambuco might be worked to advantage for marble and some gold.

Minas Geraes is a very wealthy province, and abounds in gold, diamonds, and other precious stones; also alum, bitumen, copper, iron, limestone, lead, platinum, silver, and saltpetre.

Goyaz is not much worked, but gold, silver, precious stones, granite, iron, limestone, potter's clay, and rock salt are found.

La Plata round its western parts has no minerals, but a beautiful white quartz; on nearing the mountains in the east, we come to gold, silver, copper, and iron, all of very excellent quality; and further,

The Argentine Republic, the alternative designation of La Plata, possesses alum, coal, copper, gold, salt, silver, and sulphur. There is also a large transit with Bolivian minerals.

In *Brazil* are various famous diamond mines, the most celebrated being at Serra do Frio.

Agriculture, etc.—Pernambuco is the centre of *sugar* production; Para, *india-rubber;* Rio de Janeiro and San Paulo, *coffee;* and Bahia, of *tobacco.*

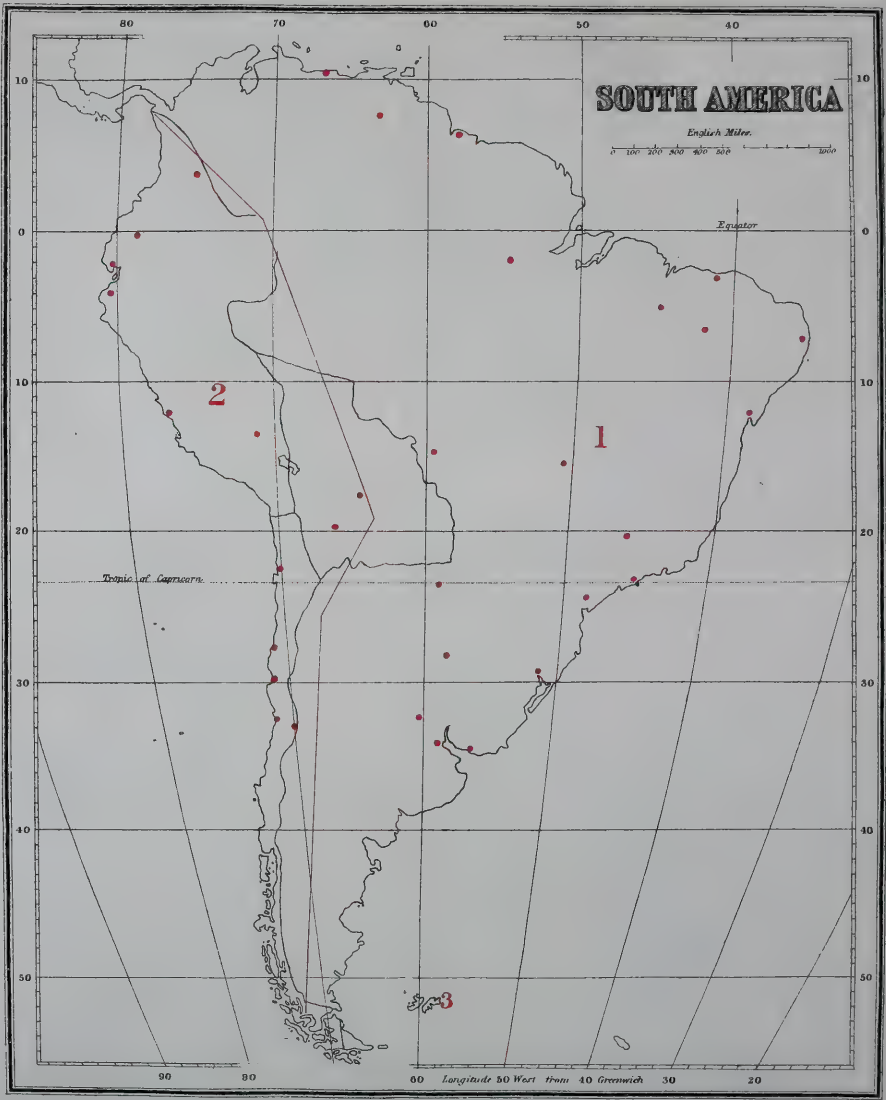
New Granada produces abundantly balsam, cotton, cacao, cattle, cedar, cinchona, corn, dye-woods, divi-divi, hats, hides, indigo, india-rubber, ipecacuanha, mahogany, maize, rice, sugar, tobacco, and vegetable ivory.

Mompox is an entrepôt. *Bogota* has an active trade, and manufactures cloth, hats, leather, and soap.

Very valuable forests abound.

DIVISIONS OF TRADE.

THE NATURAL DIVISIONS OF TRADE.



REFERENCE TO NUMBERS.

No. 1. **South American Trade**, including the sugar, rum, and molasses regions, the coffee regions, and La Plata.

„ 2. **West Coast Trade**, including the nitrate and guano regions.

„ 3. **Island Trade.**

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Venezuela is one of the richest fields for agriculture on the face of the globe, and grows to the greatest perfection the palm (Indian sago), which is a most valuable tree, every part being serviceable.

The chiquichiqui, whose fibres are made into rope; mahogany of large size.

The other products are, copaiba, cotton, caoutchouc, coffee, cacao, cocoa-nuts and oil, cheese, cattle, dragon's blood, divi-divi, drugs, fustic, goats' hides, indigo, logwood, manioc, mules, maize, niopo (used as snuff), pottery, sugar, sarsaparilla, skins, tobacco, vanilla, and wheat.

Cattle-rearing is a staple industry.

British Guiana, very fertile, but cultivation confined to the sea-coast, or a short distance from the rivers.

It produces excellent timber, both useful and ornamental, such as the *mimosa*, *greenheart*, &c., fruits (pine-apple, guava, &c.), cochineal, cassava, coffee, bananas, cotton, dyewoods, gum copal, maize, sugar-cane, yams, medicinal plants, and fibrous vegetables.

The ports export, besides the above, sugar, rum, and molasses.

Dutch Guiana, equally fertile, exports sugar, rum, molasses, coffee, cotton, and cocoa.

French Guiana exports largely annatto, also sugar, timber, and ornamental woods; coffee, cocoa, hides, gums, indigo, and pepper; with maize, rice, skins, and tobacco.

Brazil.—Para is productive of coffee, cotton, cacao, copaiba, caoutchouc, hides, india-rubber, millet, pimento, rice, rum, sugar-cane, sarsaparilla, tapioca, and tobacco.

Maranham is noted for its timbers and dye-woods, produce same as Para, with fruits, ginger, and ipecacuanha.

Piauhi, great natural fertility, and sends down the Parnahiba river, cotton, haricot, millet, manioc, rice, sugar, tobacco, and woods.

Ceara abounds in medicinal plants and drugs; balsam, gums, and resins; and exports these with cotton, dates, hides, india-rubber, and sugar.

Goyaz is one of the richest provinces in Brazil, and sends forward similar produce.

Rio Grande del Norte has a fruitful soil, and exports balsam, cotton, dyewood, gums, and timber, haricots, millet, manioc, resins, and sugar.

Parahiba exports rum, molasses, and sugar; with its own natural products.

Pernambuco exports sugar, rum, molasses, balsam, cottons, gum, resins, &c.

Bahia produces beans, cotton, coffee, cedar, dragon's blood, dye-woods, gum-copal, manioc, jalap, ipecacuanha, saffrons, fruits, sugar, and tobacco, exporting these with cigars, rum, tapioca, and piassava.

Minas Geraes is the most populated province in Brazil; yields and exports similar produce to the above.

Sao- Paulo grows a large quantity of coffee exported at Santos, together with timber (cedars, &c.), haricots, millet, manioc, maté, rice, rum, sugar, and tobacco.

La Plata.—The chief resources of this district are its immense herds of cattle, sheep, and horses, which furnish the exports of frozen carcases, jerked beef, "extracts" of meat, hides, skins, tallow, and wool; with bristles, bones, and feathers.

Copper, horse-hair, grease, maize, and wheat are shipped to a small extent; also cotton, cochineal, chinchilla fur, flax, fruits, hides, maize, Paraguay tea or maté, maize, wheat, and wool. A large transit trade is also done with Bolivia.

Llama and alpaca wools are important industries. Frozen carcases are becoming a staple.

Paraguay —Trade is restricted, but the district produces coffee, cotton, cocoa, caoutchouc, india-rubber, leather, manioc, maize, Paraguay tea (maté), rice, rum, sugar, woollen cloths, wool; wheat and yerba; tobacco largely, also medicinal plants and dye-woods.

Uruguay is very healthy, and exports bones, cereals, hair, hides, tallow, fresh meat, and carcases.

Bahia Blanca is opening out, and should become an important shipping port.

Patagonia is not of commercial importance, and fishing is the only industry.

English goods.—Manufactures and general goods are introduced into all the ports in this area by mail and other steamers.

A very large quantity of wine is brought to Monte Video and Buenos Ayres from Spain. English coal is shipped from most of the above ports.

Transit—Either *viâ* the West Indian Islands for northern ports, or by direct steamer.

The distance by sea from London being to Demerara, 4030 miles; Bahia, 4505; Pernambuco, 4130; Rio Janeiro, 5200; Rio Grande, 5870; Monte Video, 6170; and Buenos Ayres, 6280 miles.

Centres—Rio-de-Janeiro is the principal seat of Brazilian trade, and is the largest city in South America. It has one of the finest harbours in the world. Rio has manufactures of glass and leather. It does an extensive *transit* trade with English coal and general goods, flour from the Adriatic, in exchange for produce. *Coffee* is rapidly becoming a most important staple product.

Monte Video has no manufactures, but a very extensive local and transit trade.

Buenos Ayres, the centre of an immense trade, is an emporium for wool, hides, tallow, &c., and receives large quantities of English goods and Spanish wine. This is an important mail station. The present difficulty is the approach to the town, steamers having to lie some fourteen miles out, and load and discharge by means of lighters; this difficulty is now being overcome, and Buenos Ayres must rise as one of the world's largest emporiums. The "Pamperos," too, act as deterrents to navigation under present conditions. The situation of Buenos Ayres as an outlet for "La Plata" is unrivalled.

UNITED KINGDOM TRADE.

The geographical area of this trade is self-evident, embracing the United Kingdom of England, Scotland, Ireland, and Wales. In shipping circles, employment in the "United Kingdom Trade," conveys simply the idea of carrying goods from one port in the kingdom to another; as, for example, the carrying of coals from Newcastle-on-Tyne to London.

The "Coasting Trade" is chiefly in coal. "Carrying" to Continental ports situated on the English Channel or North Sea, has been treated in the "General" Trade.

In a wider sense, the United Kingdom Trade means the whole sea-carrying trade of the nation; both the exporting of raw material, manufactures, and other commodities, and the importing of the varied produce of the world.

The simple interchange whereby our country gives its own surplus produce for that of another, is, in principle, a transaction of the most elementary character.

With the less advanced states, commercial intercourse does not extend beyond these narrow bounds. Their share in maritime trade is entirely *passive*, that is, awaiting the call, at home, of foreign traders, to whom it is left to fetch and carry produce.

More advanced distant states are engaged in *active* commerce, that is, they conduct the actual maritime transit of goods from port to port.

With the whole world as the field, which it has become, both of production and distribution, the commercial system, in its active aspects, presents features of a more complex character, involving phenomena described as "the movements of the markets." Merchandise shipped in distant ports, may be trans-shipped and shipped again, more than once, and may or may not be greatly altered in form and value, before reaching its ultimate destination. As familiar instances, the cotton fibre of the American plantations, intended to clothe the Hindoos and Chinese, reaches England and passes through the Lancashire looms, before fulfilling its commercial mission in the East: and Indian spices are docked in London before their distribution over the continent of Europe.

The experience and foresight of traders are exercised in regard to cargoes both outwards and inwards. The cargo being ready, a port has to be selected; or, the port being selected, a suitable cargo has to be considered. A cargo being discharged in a foreign port, the question at once arises of the destination of the return cargo. It may or may not be prudent to make for home direct. The decision is regulated by "the movements of the markets." Demand and supply fluctuate. Traders watch these fluctuations, and carry their merchandise where the demand is greatest, that is, where it is most needed, and where dealers are ready to give the highest value in exchange, or, in other words, where the largest profits may be made.

In the days of sailing ships and long voyages, these responsible duties were entrusted to and assumed by the captains or commanders, who sought information from port to port, and acted upon their own judgment. They advised their principals through the agencies at their command, generally that of passing vessels, homeward bound, and remitted, from time to time, the proceeds of their venture; not themselves returning home, for, occasionally, two or three years.

The transformation now effected, and within a few brief years, in the entire mercantile system, ranks among the most marvellous features of civilisation.

The old "Indiamen" and "merchantmen" have nearly disappeared, a few only remaining for the general timber trade, for which these wooden vessels are specially adapted, by the facility they admit by bow-ports, or openings in the vessels' bows for expeditious loading.

Their wooden hulls have given place to iron and steel, with the motive power of steam in lieu of sails; swift and much more capacious vessels make the circuit or half-circuit of the globe, in fewer weeks than the "sailer" occupied months, and timed to port, out and home, to a small, yet safe and certain, margin of hours.

Swift passage by sea, and rapid railway transit by land, have rendered postal service reform possible, and placed all the ports of the world in correspondence. These are triumphs of scientific skill, transcended by the instantaneous communication bestowed upon us by the electric telegraph.

As immediate results of this great commercial "evolution, not revolution," the old captains are as extinct as their vessels. Their former responsibilities are accepted by the merchant proper at home. Agents are stationed at the ports of call, whose business it is to have cargoes ready to date. Time enters into account as rigorously in port as on the passage. Commanders ought no longer to have to seek freights. Advices from their employers await them in every port, and they act upon instructions from home; the scope of their judgment is limited to loading, and the safety of ship, cargo, and crew.

Fluctuations of value are not caused by the scarcity of commodities, but by the *fear* of scarcity,—for they are in evidence long before actual scarcity arises. As a further immediate result of our instantaneous system of correspondence, extreme fluctuations, the birth of fear, and magnified by delay, are no longer possible. Before fear finds expression, the electric pulse transmits a throb vibrating along every commercial artery, until it enters the return current. The fear of want is removed before even its possibility is foreseen, except by the few commercial experts whose special function is to safeguard the community from the risks of extremes, that is, producers from extremes of supply, and consequent fall of values, consumers, from the extremes of demand and consequent rise. Fluctuations in this wise are reduced to a minimum.

A third immediate result upon our commercial system of the rapid transmission of intelligence, is the incentive it has given to the practice of insurance, whereby losses are, not, as often averred, *averted,* but spread over so wide an area, that the part borne by each individual is comparatively unfelt. The foundering of an insured vessel is as great a diminution of the sum total of the world's wealth, as of one uninsured,—but, it is borne by the many instead of the few.

The great Marine Insurance institution of the world is "Lloyd's," of the Royal Exchange, London. The world-wide fame and authority of this unique corporation have been reached *pari passu* with the expansion of the commercial system in recent days.

"Lloyd's register" gives the "ship's history," in effect, of every vessel afloat in any part of the world—verified and rectified daily by the intelligence through "Lloyd's agents," from every point of the compass. It was the constant custom in the days of long voyages, sailing ships, and unfrequent communication, to accept the risks of the voyage, even where wreck meant ruin to owner and merchant.

Where, too, "overdue and missing," and insurance was resorted to, the premiums ran up with the uncertainty, until they reached the full value of the ship and cargo, equivalent to declining insurance. Distant maritime perils are, with our present means of transmission of intelligence, oftentimes as well known at Lloyd's at the time as to the captains in command. The loss of a vessel is reported without delay.

Fewer missing vessels are entered as "never heard of." The element of uncertainty is in a great measure eliminated. Rates of insurance are thereby equalised or saved from extremes, and the system of covering vessel and cargo against loss has grown universal. Steadfastness is thus imparted to commercial pursuits, and, while fewer colossal fortunes are amassed by chance-strokes, and *lucky*, rather than *safe* ventures, losses have been avoided, wealth in the mass has grown faster, and the prosperity of our race has been more amply ensured.

These considerations affect the United Kingdom more than any other state. England is the great merchant-carrier as well as the emporium of modern times,—"Eclipse" in the race, the second nowhere. "Our own flesh and blood" in the United States, bears nearly the same relation to the rest of the commercial world, as England bears to the American Union, yet its trade does not exceed, though with a much larger population, the half of British commerce, —that of France ranking next to the States.

Great Britain, by its machinery, mining industries, handicrafts, and shipbuilding, draws the bulk of the population away from agricultural pursuits. The tendency has long been to depend more upon manufactures and less upon husbandry; for urban centres to become more crowded and rural parts depleted. Were the tendency the other way, so densely peopled an island could not be self-sustained on the produce of a soil within such narrow bounds.

We rely largely for sustenance upon the resources of other food-producing regions, which our vast mercantile marine enables us to transport from other climes, giving in exchange the manufactures which our mineral stores enable us to produce.

The transit facilities of Great Britain excel those of any equal area on the face of the globe. No part of the island is far from the coast, and wherever industries spring up there the railway is immediately introduced. Every local trade is "environed" with a "network" of railway lines.

The coal-fields of South Wales and Northumberland, have, at their doors, available "roads" to every part of the kingdom and to any desired seaport. The same remark applies to our densely-populated Midland districts, the "Black Country," or our copper-fields.

France and Germany emulate our means of communication. Railways diverge from every industrial centre. In the East, in Africa or America, wherever economic resources obtain, there railway enterprise enters, to stimulate industry and commerce, and promote the wellbeing of mankind.

Railways and Communications.—Every town with pretensions to trade has railway facility either with the capital or by a branch line to a main with direct approach. The capital is in *direct* correspondence with *every* port and centre, therefore it is clear every town must be in available correspondence with every other town.

Working south to north from London, we note the South-Eastern line to the "auxiliary London port" of Gravesend, forward to Rochester, and its main line through the Weald of Kent to Folkestone and Dover, this latter being our greatest "mail" port.

The London, Chatham, and Dover rail serves the same districts through the military station of Chatham.

The London, Brighton, and South Coast carries to Newhaven, with a very large *transit* trade, Brighton, Shoreham, Littlehampton, with a cross-channel trade, and the important town of Portsmouth.

Portsmouth is also reached by the South-Western, which runs to Southampton, the calling port for many ocean-going lines of steamers, having also a large transit trade with Havre and the Channel Islands. This line works west to Bournemouth, Poole Harbour, a small sailing-vessel port, and Weymouth, a coal station and trans-channel port.

To the west, the Great Western gives facility to *Bristol*, a large shipping centre; *Dartmouth*, a considerable channel coaling-station; *Plymouth*, a well-known place of call, and the rich mining county of Cornwall.

It also runs through *Gloucester*, a considerable timber and grain import place, and the vast mining districts of South Wales, to Milford Haven.

The Midland system connects Bristol and Gloucester with the north, through the manufacturing districts of Sheffield, Bradford, Manchester, and the extensive port of Liverpool; connecting likewise London and the west with the east-coast ports *viâ* York, and with Scotland *viâ* Carlisle.

The London and North-Western serves the Staffordshire potteries and the Black Country, the busy town of Birmingham in conjunction with many other lines, Manchester, Liverpool, and the Irish traffic *viâ* North Wales; it runs also to the South Wales districts, by way of Crewe, an extensive railway material manufacturing depôt, thus uniting north and south.

This line also enters Scotland *viâ* Preston, Lancaster, and Carlisle, touching with the Midland the busy port of Barrow.

The Great Northern, with North-Eastern, serves Liverpool, Manchester, Sheffield and the Midlands, with all east-coast ports, and enters Scotland at Berwick-on-Tweed.

The Great Eastern gives transit to the Wash, Norfolk and Suffolk coasts with the cross-channel port of Harwich, working also a busy branch along the north side of the Thames.

All our roads are excellent. Canals, some of great length, are cut in all directions.

The navigable rivers, for commercial purposes, are the Thames, Ouse, Nene, Humber, Tyne, Wear, Tees, Avon, Usk, Severn, and Mersey.

The main canals still relieve the road, and transport large quantities of merchandise to and fro. One connects St. Helens and Leeds with Liverpool. The *Grand Trunk* connects the Irish Sea and German Ocean, Staffordshire, the Severn, &c.; the *Grand Junction* extends from London to the Midlands; the *Kennet and Avon* join the Thames and Bristol; with several others.

Scotland, entered on the west at Gretna and on the east at Berwick by our great through lines, is reticulated by railways connecting the sites of industry and commerce; but the multiplication of lines is arrested in the Highlands by the paucity of towns, as well as the mountainous character and sterility of the country.

Stranraer and coast connect with the English lines at Dumfries, and the Ayrshire coast at Glasgow.

Glasgow, Edinburgh, and Leith, are in direct communication, thence north on the East Coast to Dundee and Aberdeen, projecting to the most northern point of the kingdom for the Shetland and Orkney Islands. The west coast of Scotland, of less *commercial* interest, possesses only partial communication. The chief rivers are the Tay and Clyde.

Ireland possesses a railway system, from Dublin and Belfast northwards to Londonderry, and across to the west coast at Sligo, Westport, and Galway; south to Wexford, Waterford, Cork; and west to Tralee and Limerick, and many important branch lines.

The Shannon and Liffey are the principal rivers.

Ports.—The busiest ports in England are, pre-eminently, London, with sea-going vessels to all parts of the world, an emporium for *all* imports and exports; Southampton, Plymouth, Falmouth, a "port of call;" Bristol, a large import station for sugar, timber, grain, tobacco, and Irish goods and cattle; having also an export trade with the West Indies and States.

Sharpness and Gloucester, chiefly wood imports.

Newport, Cardiff, and Swansea, the great South Wales coal and fuel export stations.

Milford Haven, a port likely to rise into commercial importance, the finest harbour in the United Kingdom, affording safe anchorage for the whole British Navy,—Mil = a thousand, referring to its capacity for an indefinite number of vessels.

Liverpool, a vast emporium, with trade to all parts; the large "cotton" import city; there is much talk of connecting this city and Manchester by canal.

Barrow, with a large export of iron; Whitehaven, Lynn, an import trade, chiefly of linseed and timber.

Hull and Grimsby, with an extensive coal and transit trade, across England from west to east and across Channel. These are also great fishing-stations; and with London absorb a great portion of the Baltic and sleeper trade.

Middlesbro-on-Tees, an iron centre. Hartlepool, Sunderland, and Newcastle-on-Tyne, our great east-coast coal and iron centres.

There are fishing and many smaller ports.

Scotland.—*Leith*, an important coal station. Dundee, for jute import. Montrose, Aberdeen, and Inverness, chiefly cereals.

Glasgow, another emporium and shipping centre, with universal communications.

Also a few ports on the Ayrshire coast for coal export.

Ireland.—Dublin, Belfast, Londonderry, Limerick, Sligo, Cork (Queenstown), port of call; Waterford, and Wexford.

Irish trade, except for cereal import, is chiefly coasting, or rather transferring Irish produce to English centres.

Principal Towns—England.—Hexham, Alnwick, Durham, Darlington, Carlisle, Keswick, Kendal, Appleby, York, Leeds, Bradford, Halifax, Wakefield, Huddersfield, Sheffield, Dewsbury, Barnsley, Rotherham, Doncaster, Lancaster, Preston, Bolton, Wigan, Manchester, Blackburn, St. Helens, Rochdale, Oldham, Warrington, Chester, Macclesfield, Nantwich, Crewe, Stockport, Derby, Chesterfield, Belper, Nottingham, Mansfield, Worksop, Newark, Lincoln, Boston, Spalding, Shrewsbury, Bridgenorth, Wellington, Kidderminster, Stafford, Wolverhampton, Walsall, Bilston, Burton, Hanley, Stoke Newcastle-under-Lyne, Leicester, Melton Mowbray, Hereford, Leominster, Worcester, Droitwich, Birmingham, Coventry, Rugby, Warwick, Northampton, Kettering, Peterboro, Huntingdon, Cambridge, Wisbech, Norwich, Yarmouth, Ipswich, Sudbury, Gloucester, Stroud, Pontypool, Ebbw Vale towns, Banbury, Witney, Woodstock, Buckingham, Wycombe, Aylesbury, Bedford, Luton, Dunstable, Chelmsford, Maidstone, Chatham, Woolwich, Greenwich, Lewes, Southwark, Guildford, Reigate, Farnham, Reading, Newbury, Wilton, Westbury, Bradford, Devises, Poole, Portland, Frome, Crewkerne, Yeovil, Honiton, Barnstaple, Tavistock, Truro, Redruth, Penzance, St. Austell.

Wales.—Carnarvon, Wrexham, Ruabon, Flint, Mold, Holywell, Holyhead, Dolgelly, Welshpool, Newtown, Cardigan, Pembroke, Carmarthen, Llanelly, Brecon, Merthyr Tydvil, Dowlais, Aberdare, Neath, &c.

Scotland.—Wick, Inverness, Aberdeen, Montrose, Arbroath, Forfar, Perth, Culross, Dunfermline, Stirling, Dumbarton, Campbeltown, Renfrew. Paisley, Greenock, Glasgow;

Lanark, Airdrie, Edinburgh, Ayr, Kilmarnock, Dalkeith, Peebles, Selkirk, Hawick, Jedburgh, Dumfries, Kirkcudbright, &c.

Ireland.—Londonderry, Ballymena, Larne, Newry, Downpatrick, Dundalk, Dromore, Lurgan, Dungannon, Drogheda, Dublin, Lisburn, Balbriggan, Wicklow, Arklow, Wexford, Kilkenny, Tullamore, Waterford, Cork, Kinsale, Tralee, Limerick, Kilrush, Ballina, Galway, Sligo, &c.

Minerals.—England is rich in minerals: *Cornwall* produces from its well-known mines the finest *copper* and *tin.*

Coal in vast abundance in South Wales; some near Bristol; large fields in the Midland counties, producing the well-known "Silkstone:" then there are the great north-eastern fields of Northumberland and Durham; Cumberland also, with outlet at Whitehaven.

The Lancashire pits, Staffordshire and "Forest" of Dean coal are well known.

There are coal-fields round Liverpool and several minor areas throughout the kingdom.

Iron in Yorkshire, in great quantities, especially in the Cleveland districts. It also abounds in Staffordshire, Shropshire, and other parts.

Salt in vast amounts round Nantwich, Droitwich, Runcorn and Cheshire districts.

Lead in northern and south-western counties. *Plumbago* in the "Lake" district. *Slate* is worked in Cumberland; *Fuller's earth* comes from Reigate.

Bath, Portland, Swanage and Yorkshire yield building and paving stones.

Zinc and other metals are found in various parts.

Scotland.—Coal throughout Lanark and Ayrshire and to the east coast round the Firth of Forth.

Iron in Fifeshire, Stirling, Ayr, Lanarkshire, and other parts.

Lead in the Lowthers, &c. Limestone, sandstone, ironstone, and the famous Aberdeen granite abound.

Some slate is worked on the west coast.

Ireland yields copper, granite, hornblende, limestone, lead, iron, mica, chalk and coal. *Coal* is found in Kilkenny, Tyrone, and elsewhere. *Copper* is worked in the east coast counties. Marble, rock-salt, and sulphur are also worked, and a little silver is found. *Pyrites* in Wicklow.

North Wales provides an abundance of the finest slates.

Our export and home consumption of coal is enormous. The metals are generally sent out as manufactured articles and not as raw material.

Industries, agriculture, etc.—Agriculturally we may divide England thus, *Wheat*, south and south-east: *Barley*, midlands and northerly: *Oats*, north.

Vegetables universal. *Hops*, Kent, Surrey, Worcester and Hereford.

Orchard fruit, south-west counties.

Pasturage universal.

Food-producing districts for specialties.—The vale of Cheddar, Cheshire, Gloucestershire, Melton Mowbray, Leicestershire and other parts are world-famed for cheese production. Devonshire for butter, cream and dairy produce. Cambridge, Epping and Buckinghamshire produce famous sausages, and Reading is a centre of biscuit-making. Salt comes from Droitwich, Nantwich, Cheshire, &c.

The fisheries of England are very valuable, Grimsby, Hull, and London being very important centres. Yarmouth is specially noted for its herrings and "bloaters," and Penzance for pilchard.

Burton-on-Trent is said to be built upon beer, from its extensive breweries, every great firm being represented. London possesses vast breweries and distilleries. Almost every county likewise produces its special beer.

Bristol is the great centre for Irish dairy and other produce, and cattle, and is also largely engaged in the tobacco trade.

Portsmouth is the depôt for foreign cattle.

London is the chief depôt for North Continental cattle; frozen carcases and tinned meats received in great measure from Liverpool by "meat trains."

Devizes and Hungerford are central markets for cereals and other agricultural produce; and Farnham and Southwark for hops.

Textiles, etc.—Nottingham heads the lace and hosiery trade; Luton and Dunstable are seats of straw plaitings, hats, &c.

Manchester is the centre of our great cotton and textile industries.

Honiton gives its name to a well-known lace.

Kidderminster is a centre of woollen manufactures, and gives also its name to carpets; Witney for blankets; Rochdale, Halifax, and Welshpool for flannels; Worcester, Yeovil, and Oxfordshire give gloves.

Silk has its central works at Coventry, Macclesfield, Manchester, and Spitalfields. Gloucestershire, Somerset, and Wiltshire produce the "West of England" broadcloths; Norfolk is noted for worsteds; Leeds contains the great Cloth Hall for Yorkshire manufactures, and is also the centre of the woollen industry. Leicestershire also supplies hosiery.

Several *Welsh* counties have a pre-eminence for woollen work.

Smaller centres of textile industry might be given to a very large number.

Northampton is the home of the boot trade, and with Stafford and Southwark enjoys all leather manufactures.

Ironwork.—The chief smelting districts are Wolverhampton, West Bromwich and neighbourhood, Rotherham, Middlesbro-on-Tees, Merthyr Tydvil, and Aberdare.

Heavy iron goods from Birmingham, Dudley, &c.

Cutlery from Sheffield, Birmingham, &c.

Machinery, Birmingham, Sheffield, Leeds, Crewe, Wolverton, Swindon, &c.

Nails, Dudley, &c. Pins and needles at Redditch, &c.

Steel and ironworks throughout the "Cleveland" district of Yorkshire; also Durham, parts of Northumberland and South Wales; tin plates at Swansea and in Monmouthshire.

Sundries.—Shipbuilding at all the north-east coal ports, on the Thames and Mersey; also at Barrow to a large extent, and at Southampton.

Birmingham is a great leader in glass manufacture, together with Stourbridge, Newcastle, and Bristol.

Staffordshire is famed for its potteries, chiefly crockery and earthenware articles; and Worcester for porcelain wares.

Buckinghamshire is the county for "Windsor" and cane-seated chairs, for which High Wycombe is the central market.

Crewe, Rugby, Swindon, Derby, Doncaster, &c., are great railway centres, and manufacture "plant," carriages, &c.

Stourbridge is noted for its bricks.

Clerkenwell, Coventry, and Lancashire are centres of clock and watchmaking industries.

Paper is manufactured in Kent and Hertfordshire.

Chemicals, soap, dyes, and all outside work are attached to our large towns. Patent fuel and alkali works at Swansea.

Scotland.—This is the home of plaids and tartans, with a variety of woollen and other textile manufactures, in which Aberdeen and Inverness take the lead.

Dundee, the great shipping import town for jute and flax, produces sailcloth, plain linen, sacking, and sheetings.

Dunfermline is noted for diaper and damask, especially table-linen.

Paisley is a great centre of silk work, cotton industry, and shawls; Kilmarnock and Stirling for woollens, also Galashiels and Aberdeen.

Carpets from Kilmarnock and Dundee, the latter also supplying gloves; while Stirling produces well-known tartan.

Food, Agiculture, etc.—Oats are the chief cereals grown; wheat will not flourish north of Dornoch Firth; vegetables and cattle food abound.

Oatmeal cakes and bread are general throughout Scotland.

Aberdeen gives a brand to a famed marmalade.

Whisky distilling is largely carried on in most parts of Scotland.

The fisheries are very valuable.

The smelting, hardware and iron works lie round the coal and iron fields.

A staple industry is shipbuilding, for which the river Clyde has a world-wide renown, the river banks from Glasgow to the "Tail o' the Bank" presenting a busy and animated scene in all naval and architectural and marine engine work.

Ireland is a land largely covered with bog, still it boasts some good industries; it is, however, *mainly* agricultural. Oats and potatoes are the chief crops.

Flax and hemp are grown in Ulster for the linen manufactures.

Ireland is famed for its cattle, all dairy produce, and gives its name to a noted whisky. It has excellent fisheries.

Ireland also gives a mark of distinction to certain textiles, known as Irish linens, muslins, poplins, &c.: the locality of production is Ulster.

There is some activity in calico prints and woollens: cotton at Belfast: lace and poplins at Dublin.

Belfast has the largest shipbuilding yards in Ireland.

Taking the trade of this country without its agricultural result, it does not show much activity.

Islands.—Shetland, Orkney, Hebrides, Scilly Isles, Isle of Man, and the Isle of Wight, may be called solely agricultural and seafaring.

The Shetlands gives their name to a breed of ponies, and a little wool work is done.

Goods.—All raw material from every clime is introduced into England, both for food and manufacture, either to be consumed at home, or again to leave our shores for world-wide distribution.

Transit.—By sea (coasting) to any part of the coast of the United Kingdom.

By rail or road to *any* town or village inland or to any port.

WHITE SEA AND NORWAY.

The natural divisions of this trade are easily seen: 1st, the "White Sea" Trade covers an area occupying North Russia round the White Sea, or geographically described, "all Russia east of Finland and north of the line spoken of in the Baltic Trade Area 5 as running from Serdopol to Solikamsk;" whilst, 2d, "Norwegian Trade" takes in the whole of Norway, thus overlapping for a few miles round Stavanger and Christiania, the boundary line of the "extra" *Baltic* area round Stavanger and Drammen, referred to under "Baltic Trade," Area 7.

Commerce, in these areas, is very limited, owing to the climate, and the fact that ice prevents navigation for the major portion of the year.

The trade, as far as Norway is concerned, consists in sending out from England, coals, some manufactures and cotton to Bergen and Christiansund in exchange for fish and wood.

Cereals are grown in several parts of Norway, but they are not equal to the home consumption. Foreign countries have therefore to supply the deficiency; the imports of cereals and cotton going principally to Bergen.

The rugged nature of the country and its inclement climate seem to preclude its ever rising into extensive commercial importance.

The "White Sea Trade" is limited to a very short season, the average being three months, from July to September, before and after which the sea is blocked with ice.

The same commercial rules as the Baltic guide this trade.

Railways, etc.—In Norway railways to any great extent are impossible; although there is one main line from Drontheim to Hamar, on lake Mjosen, thus giving, with the navigation on this lake, uninterrupted communication from the Drontheim district to Christiania, South Norway and Sweden.

There is not a single town situated otherwise than on a fiord.

The entire country north of that described under "Baltic Trade," Area 5, embracing the White Sea district, depends for transit upon canal, river and road. The winter service is by sleigh.

The rivers Onega and Dwina connect with the two White Sea ports of Onega and Archangel.

Ports.—In Norway, Bergen, Romsdal, Christiansund, Drontheim, Levanger, Tromsoe, and Hammerfest.

In *North Russia* (White Sea) Onega, Archangel, Kemi and Mezene.

Towns.—In *Norway*, none beyond the ports.

In *Russia*, Solvitchegodsk, on the Dwina, Povenetz and

Pudoj, on Lake Onega, for St. Petersburg; and Kolmoger on the Dwina.

The rest are villages and scattered agricultural districts.

Minerals.—In *Norway*, not so extensive as the neighbouring country of Sweden; but cobalt, copper, silver and iron, are all worked to a limited extent; as also alum, chrome and marble.

Gold is found in the Government of *Archangel*, but no other minerals occur.

Agriculture, etc.—The forests are the great sources of wealth both to Norway and Archangel.

The cod and herring fisheries of Norway also rank of the highest importance.

Flax and hemp are generally grown, and a little exported. Cereals are not grown sufficiently for home consumption, therefore Norway has to import.

Hammerfest sends eider-down, furs, oil and skins into Russia; Drontheim exports largely a well-known beer. But the staple trade is fishing and timber dressing, with some shipbuilding; bones, fish and skins are likewise exported.

The staple export from the White Sea is oats, with wood from Archangel.

At Archangel there is some shipbuilding, and manufactures of cordage and matting.

The whole of this government is one continuous flat, and the only crops raised of any importance are flax, hemp, oats, and rye.

At Kemi, salt and naphtha from the springs there, are worked and exported. Amber is also met with.

Further articles exported from the surrounding countries are codilla, linseed, oil, pitch, tar, tallow, deals and wood.

Mezene has a trade in furs, fish, oil, and tallow.

Solvitchegodsk has extensive salt works, leather factories, and tallow melting establishments.

English goods.—Coal and manufactures to Bergen, Drontheim, and Christiansund, but not to a very great extent.

Goods to the White Sea *viâ* the Baltic.—It would appear that except during the brief summer, when steamships proceed to the White Sea, that the trade would languish, but the canals and frozen ways at all times constitute very fair transit.

Transit.—To Norway by steamer.—London to Bergen, is 587; Christiansund, 740; Drontheim, 845; and Hammerfest, 1355 miles.

To Archangel, the shortest route is *viâ* St. Petersburg, from which city it is about 400 miles distance, by road.

By sea, London to Archangel is 2027 miles.

Centres.—*Archangel* is the emporium for Northern Russia; it is closed to navigation for nine months of the year. It has local industries, of shipbuilding, making matting and cordage, preparing pitch and tar, and rope-making. It has trade with Siberia. Coasters bring round skins and furs, which are sent into the interior through Archangel. This port has no factories.

Bergen is an important emporium, receiving cotton from the United States, goods of all sorts from England, and cereals from the Mediterranean. It is the centre of the fishing industry. There are local manufactures of marine stores, porcelain, rope-making, and tobacco. The staple trade is fish, with *transit.*

AFRICA, WEST COAST.

In this trade we include the west coast of Morocco west of that portion referred to under the Mediterranean Trade, the West Coast proper being Senegambia, Gold Coast, Slave Coast, &c., and lower Africa to 15° S., divided by an imaginary line drawn from the frontier of

Algeria and Morocco to Lake Chad and then south to Orange river. The area or tract of country *East* of this line, and bounded by the Mediterranean, Red Sea, Zanzibar, and Cape Trades, forms the African "Intermediate Zone," with equal facility of outlet through any of these trades.

Commerce on the "West Coast" is practically confined to "coasting" trade, owing to our want of knowledge of far inland, to the barbarity of the natives, and to the unhealthy climate.

The trade is confined to the "ports," where English goods are bartered for native produce. The specialty of this trade is "palm oil."

The climate is extremely unhealthy for Europeans, Sierra Leone being stigmatised as "The White Man's Grave." Fevers and malaria arise from the decomposed vegetable matter descending the rivers. There are not wanting indications that with proper sanitary appliances these dangers may gradually be overcome. It is more the *surroundings* than the *climate* that is so fatal.

The "Gold Coast," so called, first brought this trade into prominence; and for those prepared to brave the climate, and render service to the sea-ports, there is a great commercial opening.

The coast is divided into sections or divisions, as Senegal, Gambia, Sierra Leone, Windy Coast, Slave Coast, and Calabar Coast.

Communications.—Except by the rivers Senegal, Gambia, Rio Grande, Congo, and Niger, the transit is entirely by caravan.

The caravan routes from the north-west enter this area at Wadan, and continue to the common depôt Wálata; a second great route across the Sahara comes through Timbuctoo and Bassikunnu; while a third route across the desert from the East, converges at Agades. From all these places there are several roads to the coast.

Ports.—These consist of St. Louis, Goree, Bathurst, Biafare, Sierra Leone,—the Liverpool of Western Africa,—Sherbro Islands, Monrovia, King George Town, Axim, Cape Coast Castle, Elmina, Accra, Quitta, Whydah, Great and Little Popo, Lagos, Benin, Brass, New Calabar, Old Calabar, the Cameroons, Fernando Po, and Gaboon.

The thickest districts for ports are the Gold and Slave Coasts.

Towns.—The cities of Timbuctoo and Sackatoo are the places of greatest repute as emporiums, other places being transit towns or villages. Their productions, as well as the yield of their vicinity, are sent to the seaboard *before* it comes into our hands. It is not therefore of commercial importance to name towns beyond the seaports.

Minerals.—Gold, in chief, throughout the Gold Coast and in most other districts.

In Senegambia iron might be worked.

Liberia is rich in unworked minerals.

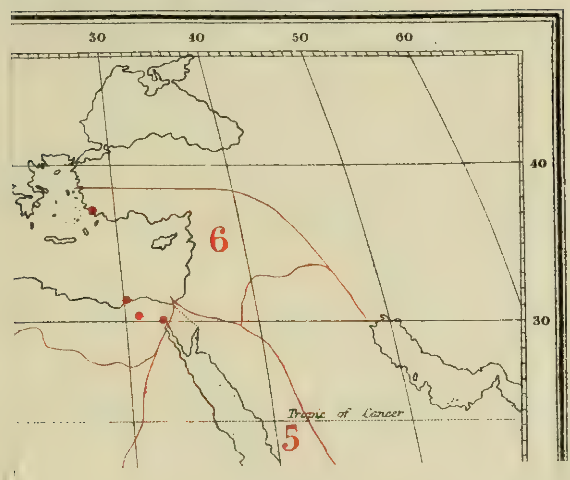
Ashantee abounds with gold. Salt is very plentiful in most districts; but owing to the want of proper industry it is impossible to define the minerals yet available for commerce. There is a little lead worked in Lagos.

Agriculture.—This whole area is most prolific in vegetation. Produce is brought to the coast and shipped, being bartered for English commodities, trinkets, &c.

Cowries are the inland medium of exchange.

Timbuctoo boasts a few manufactures, and has its chief outlet at Mogadore, in Morocco, 900 miles distant. Kano also does some leather work. The produce of each part of this area is similar, and consists of beni-seed, copal, camwood, cola-nuts, cocoanuts, cassava, cotton, dyewoods, fruits (banana, pine apple, yams, &c.), feathers, ebony and other

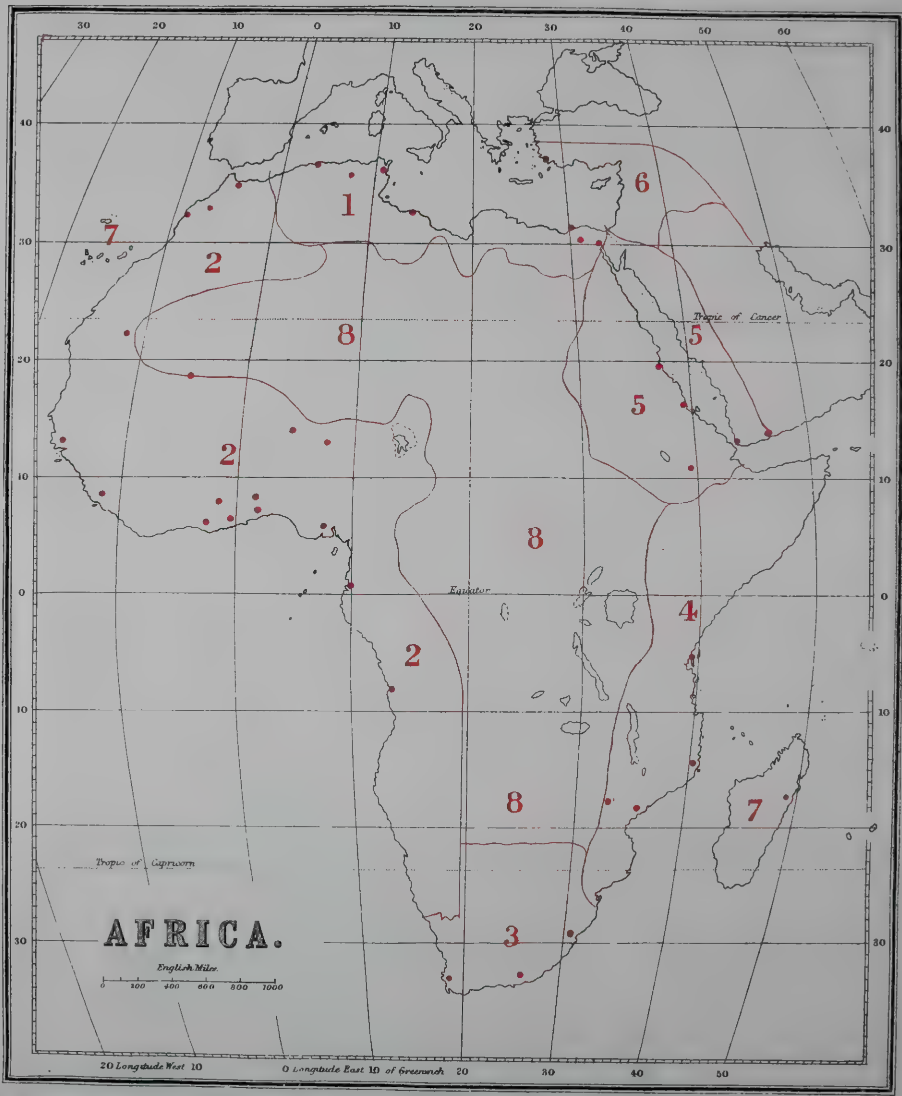
SIONS OF TRADE.



THE NATURAL DIVISIONS OF TRADE.

REFERENCE TO NUMBERS.

No. 1. Mediterranean Trade (South Shore).
,, 2. Morocco and West African Trade.
,, 3. Cape Trade.
,, 4. East African Trade.
,, 5. Red Sea ,,
,, 6. Levant ,,
,, 7. Island ,,
,, 8. Intermediate Zone, from whence produce enters *any* of the sea-board areas in accordance with the demand and ease of transit.



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ornamental woods, gold, gold-dust, guinea grain, grass cloth, gums, ginger, ground nuts, hides, indiarubber, ivory, lentils, pepper, palm oil and kernels, palm nuts, skins, silk from Lagos, tobacco, teak, and wax.

Cotton, indigo, maize, sugar, and tobacco are capable of general cultivation, and do grow in Ashantee.

Inland of Sierra Leone is still unexplored to any great extent.

The province of Gambia is admirably adapted for cereals. The export at present is almost wholly ground nuts.

Extensive palms flourish on the Gold Coast. Lagos has some native industries, and manufactures bamboo work, grass cloths, mats, &c.

English goods.—English manufactures and necessaries for our military stations and the wants at the seaports find their way by steamer, as also trinkets, glass, crockery, and earthenware.

Coal is sent largely to Sierra Leone and Fernando Po.

Transit.—By mail steamer, the distance from London to Sierra Leone being 3000, and to Cape Coast Castle 3870 miles.

Area 2.

The country further south embraces the Congo River, Ambriz, St. Paul de Loando, and Benguela. This, again, is only a seaboard and barter trade; although there are mills at these places for extracting the palm oil, still the trade is only local.

The Congo is navigable for about 500 miles. The resources of the country are enormous, but untransportable.

Minerals, consisting of copper, gold, iron, lead and others, have been found.

The agricultural produce consists of amber, beeswax, copra, coffee, caoutchouc, dye and other valuable woods, fibre, ground nuts, ivory, palm nuts, oil and kernels, sesame and skins.

Coffee, cotton, and the sugar-cane grow wild. Crystals, petroleum, and sulphur are obtainable from Benguela and neighbourhood.

A considerable quantity of coal is sent from England to St. Paul de Loando.

The produce is bartered for manufactures, gunpowder, and trinkets.

Area 3.

With regard to the coast from Gibraltar down to St. Louis, the only portion of commercial interest is Morocco, for from lat. 30° N. to 17° N., there are no ports or places of interest, being principally desert, the western portion of the great Sahara.

Morocco presents a field almost entirely undeveloped; its soil has many special advantages; *inter alia*, it is admirably adapted to the growth of a light-coloured barley, which would readily find a market in this country. The caravans, too, from Timbuctoo and Negroland arrive at Morocco and Mogadore with valuable treasures; it is true, the harbours at present are not "first-class," but a little dredging would at small cost open out two or more fine harbours on this coast, and commercial men should not lose sight of these *facts*.

It is an old saying about an Englishman's "pluck;" a little of this in new fields of enterprise would soon bring concessions from rulers, and enable our manufacturers to send out their goods in exchange for valuable commodities, and to adapt themselves to fresh wants created in a "new market."

But in entering new fields, Rothschild's definition of "merchandise" should be remembered. He says, "By merchandise is meant every commodity that, by its nature, is calculated to minister to the wants of man, and so becomes valuable as an article of barter." Manufacturers or suppliers of man's wants should be prepared to adapt themselves and their goods to circumstances and the real requirements of the people seeking, and not drive business into foreign hands by an inflexible "hard and fast" rule of manufacture or conduct.

Communication.—Morocco is served by caravans from Tafilet, close to the desert. This seems to be a recognised trade centre, many caravan tracks converging thereto, reaching the coast through Fez to Laraiche, or through Tedla to Robat.

Morocco and Tarudant are also in communication with Fez, Mequinez, and Tedla.

Most places have direct communication from the desert to *Mogadore*, on the coast.

Mogadore is the "port" of Timbuctoo, the desert rendezvous of the caravan routes between this port and Morocco being Tatta.

Ports.—These are Tangier, Laraiche, Mehedia, Robat, Fidallah, Mazagan, Saffi, Mogadore and Assa.

Towns.—The transit centres are Tafilet, Tarudant, Morocco, Tedla, Fez, Mequinez, and several smaller towns or villages.

Minerals.—Rich copper ore is worked near Ofran and brought to Tarudant: also mines at Teseleght.

There are other rich minerals yet to be worked, consisting of antimony, copper, coal deposits, iron, lead and tin, with some gold and silver.

Agriculture, etc.—Morocco is a fertile district, but agriculture is extremely backward.

Beans, canary-seed, and millet are grown.

The produce of the country available for export is aniseseed, bark, beans, cereals, canary-seed, cardamoms, coriander-seed, cumin, cotton, esparto, fruits, gum, hemp, maize, millet, manna, oil, ostrich feathers, pimento, pease, saffron, skins, and wool, with a few manufactures.

The fruits are almonds, dates, figs, lemons, olives, oranges, pomegranates, &c.

Mogadore is a great *entrepôt*, and exports all produce brought from the interior, including ivory, leather, wool, and copper from Timbuctoo and Negroland, of which district this is the port.

Tafilet dates are well known.

Tedla manufactures woollen cloths and shawls.

Morocco has large leather-dyeing works, and gives its name to the famous "Morocco leather."

Fez gives its name to the red turban-like fez caps; and also manufactures handkerchiefs, carpets, shawls, sashes, woollen fabrics, and leather.

English Goods.—The trade of Morocco is carried on by a regular line of steamships from England, conveying all English goods; supplemented by a few "outside" steamers, and some sailing vessels, but the trade is not flourishing.

The distance from London to Mogadore is about 1485 miles; and Mogadore to Morocco is 125; Tarudant, 125 *viâ* St. Cruz, or 185 by road throughout; and Timbuctoo, 900 miles.

WEST COAST, SOUTH AMERICA.

The term "West Coast Trade" is applied to this division, which is the geographical portion of the South American continent to the westward of the imaginary N. and S. line described under the "South American Trade." It was being worked before the west coast of Africa was at all opened out; hence the term "West Coast" by itself implied the trade of Chili, Peru, and adjacent coast of South America, conveying to the mind the carriage of nitrate and guano.

The commercial specialties of this coast are, guano, nitrate, silver and copper ores, drugs, balsams, and bark.

Silver is shipped in ingots from Cobija, &c.

Saltpetre from Iquique. The other products are brandy, bananas, barley, borax, balsam, bark, cocoa, coal, cobalt, cotton, charcoal, cinchona, copaiba, copal, caoutchouc, chinchilla fur, coca, coffee, copper, gold, flour, hides, hemp, iron, jerked beef, lead, indigo, honey, guava, maize, manioc, mercury, Panama hats, orchilla grass, provisions, regulus, rice, ratania, sugar, skins, salt, sarsaparilla, potatoes, tobacco, tallow, vanilla, vicuna and sheep's wool, tin, wines, wax, wheat and wood.

The lofty chain of Andes mountains, lying not many miles from the coast, leaves but a comparatively narrow strip of land in such a vast expanse of country, for commercial purposes.

But this land is most richly endowed with minerals, and a much larger trade is yet to be developed in Ecuador, Peru, Bolivia, and Chili.

The work is chiefly done by sailing vessels. The great length of voyage renders it difficult to employ steamers, owing to the large consumption of fuel. The quantity of "bunker" coal required would be so enormous as to seriously curtail the carrying power of the vessel, and there is no coaling station within reasonable cost until we reach the southern portion of Chili.

Railways, communications, &c.—Railway work is slowly making progress in Peru. The only lines are—Santa to Huaras and Pampas, at the foot of the Andes, about 123 miles in length. Lima to Janja, about 115 miles; this line passes the mountains, and may largely increase the trade at Lima.

There is a coast line from Huacha, through Chancay, Callao, Lima, Canete, to Pisco and Yea, 230 miles. There is a good useful line from Mollendo,—a rising port since the rail,—into the country to Puno and Lampa on lake Titicaca, and extended thence to Cuzco; a total length of a little over 400 miles, and opening up a country which is rapidly becoming fertilised and worked.

The communication with lake Titicaca, by the line to Puno, opens up the navigation of this lake to its southern shore, at Penas, where there is a fresh line to La Paz, only 40 miles off, continued *viâ* Oruro and lake Aullagas, Huanchaca, to Antofagasta and Mexillones, having a total length of about 700 miles, and opening up a large tract of exceedingly fruitful country.

The only other lines are, short ones, from Ylo on the coast to Moquegua, 33 miles; Arica to Tacna, 30 miles; Pisagua, in a semicircle to Iquique, 100 miles; and Patillos to Chipano, inland 40 miles. Total rail mileage, 996 miles.

The rivers are small and of no length, owing to the proximity of mountain to sea.

Transit otherwise by road.

The mountains approach nearer the sea, in Chili, within an average of less than 100 miles, and in no case does the railway cross this chain.

The lines below Iquique are Caldera to Copiapo, and branching to Puquios, on the one hand, S. Antonio, and Jaun Godoy, on the other, being 90, 82, and 80 miles respectively.

Chanaral to Salado, 35 miles; and a central line from Valparaiso to San Felice and Los Andes, 85 miles: and Talcahuano, through Santiago, S. Fernando,—with branch towards the coast of 20 miles to Palmilla,—Curico, Linares, Chillan, and Conception, a course of about 380 miles, and extended 60 miles further to Los Angelos. The total rail mileage in Chili in 1886 was 1420 miles.

The rivers are very small.

For the rest the roads bear the transit.

Ports.—In Peru, these are Port Payta, Lambeyeque, Truxillo, Santa, Chancay, Callao, Chimbote, Camana, Pisco, Mollendo, Arica, Pisagua, and Iquique. *In Chili*, Port Arenas, Tocopilla, Cobija, Mexillones, Antofagasta, Taltal, Chanaral, Caldera, Port Copiapo, Herradura, Port Huasco, Coquimbo, Valparaiso, Constitucion, Talcahuano, Coronel (S. Maria Island), and Valdivia.

There are also several smaller ports: the number given will prove an index to the richness of the country.

Towns.—Owing to the productive fields of this area, the towns, as compared with other areas, are large and frequent.

All the main roads lead to *large* towns.

In Peru, we have Lima, Piura, Arequipa, Puno, Huamanga, Cuzco, Chota, Cajamarca, Moyobamba, Huamachuco, Cajatambo, Huanuco, Cerro de Pasco, Tarma, Pampas, Abancay, Moquegua, and many others.

In Chili, Tacna, Tarapaca, Copiapo, Vallenar, Combarbala, San Felice, Mellipilla, San Fernando, Curico, Chillan, Los Angeles, Santiago, and Osorno.

Minerals.—This area is one of the richest in the world; *in Peru*, the most valuable silver mines exist, gold is found in all passes; quicksilver is abundant; nitrate of soda is very largely worked; copper, iron, lead, and tin, also widely diffused.

Coal occurs on the coast; and saltpetre is largely produced.

Lobos, Macabi, and Guañape Islands are vast guano deposits.

In Chili, gold, silver, copper, iron, and lead occur in profusion.

Also, antimony, arsenic, alum, nitre, salt, sulphur; iodine and borate of soda, chiefly in the north: manganese and zinc.

The south produces coal and iron. The precious metals favour the centre.

With all this abundance and wealth of minerals, they are badly worked: with proper organisation,—modern applications, English miners, &c.—there is an enormous field yet open in Chili and Peru. The island of Chiloe is said to have developed fine coal.

Agriculture, etc.—A well-known production of the forest in Peru, is Jesuits' or Peruvian bark; it is derived from the cinchona. *Coca* also is very largely exported.

Tobacco grows well, and is extensively cultivated; also sugar and cotton. Fruits are prolific.

The Peruvian valleys are very fertile.

Lima has a large transit trade through Callao, and manufactures gold lace and fringes. Ponchos are made at Tarma.

The province of Moquegua produces excellent brandy, fruits, olives, wines. Wool and cascarilla bark from Puno.

Moyobamba yields bark, cotton, drugs, hides, sugar, sarsaparilla, and tobacco.

Arequiba manufactures gold and silver tissues; while Cuzco excels in embroidery, painting, sculpture, furniture carving, &c.

The province of Guamanga gives cinnamon, dragons' blood, and wheat; Huanaco deals in cereals, cacao, cotton, and fruits.

Abancay, cereals, copaiba, hemp, cattle, and sugar. The Peru-Chilian war has, however, greatly retarded commerce and trade.

Turning to *Chili*, the province of Atacama is devoid of agriculture, being but a sterile tract of land.

The province of Coquimbo is more fertile, but does not produce sufficient cereals for home consumption; but it has fine fruits, especially figs and grapes.

Aconcagua, further south, is still more fertile, and produces cereals, fruits, maize, marjoram, and has excellent cattle pastures.

Valparaiso province is exceedingly fruitful, yielding in greatest profusion, barley, beans, fine cloves, fruits, wheat, and hemp; as also does the province of Santiago of hops, lentils, oats, pepper, potatoes, and tobacco.

Colchagua gives a large number of cattle, horses, and mules, with some grain.

Curico province is solely mining. Valdivia is famous for its timber, which might be more largely exported; it also supplies some cheese.

Chiloe, to the south, is open to great commerce in cereals, fruits, minerals, and timber.

English goods are introduced by sailing vessels to Valparaiso principally; but there seems great need of more rapid communication. There is also an extensive coasting trade.

Bolivia.—This province has a transport exit both in Peru and at Antofagasta in Chili; and exports largely *viâ* La Plata.

It is abundantly rich in minerals, possessing the world-famed apparently inexhaustible Potosi mines; has also gold, copper, silver, tin, sulphur, and salt, but owing to want of proper transit these riches cannot be worked to advantage.

The same disadvantage applies to agricultural produce, which is ample, and consists of barley, coffee, cotton, cocoa, coca, fruits, guava, indigo, maize, manioc, oats, rice, and tobacco, cinchona bark, and medicinal herbs.

The projected line from La Paz to Antofagasta will run through Bolivia.

Granada has no west coast port.

Ecuador has its port at Guayaquil, with a short railway line of about 60 miles, and its few towns of Quito, famous for confectionery, and with some lace and woollen manufactures.

And Cuenca, with its manufactures of confectionery, cheese, cottons, Peruvian bark, and tapestries.

The minerals consist of copper, gold, lead, iron, quicksilver, and sulphur, with fine emeralds; platinum in Barbacoas.

The agricultural produce, &c., all comes through Guayaquil, the shipping port, and consists of cereals, cocoa, cotton, bark, fruits, india-rubber, hides, rice, tobacco, nuts, vegetable ivory, straw hats, yams, and orchilla-grass. Wheat will ripen at any time of the year.

Transit.—Either by Cape Horn direct, by San Francisco, or by Panama.

The distance by sea from London is *viâ* "the Horn" to Cobija, 9490; Caldera, 9210; Callao, 9970; Coquimbo, 9040; and Valparaiso, 8870 miles.

Centres.—Lima, with its port *Callao*, leads the Peruvian trade. Since the establishment of steam communication with San Francisco and Panama, Callao has increased in trade, which is entirely *transit.* Lima manufactures gold-lace and fringes, trinkets, cotton, confections, &c., and is an important emporium for the produce of the country and the shipments from other countries sent up from Callao.

Cobija is the only Bolivian port. It is rapidly rising into importance. Trade is entirely *transit*, chiefly with Valparaiso and inland.

Valparaiso, the most important port on this coast, has a splendid harbour, and since the establishment of regular steam service, the trade of the port has much increased. It is an important port of call for ship's stores, &c., being on the road to San Francisco and also opposite Australia.

It is the port of the capital (Santiago), and natural outlet of the country; has a very extensive local trade; is the *emporium* for Bolivian produce; provides Peru with flour, cereals, &c.; cereals also come through Valparaiso in connection with towns on the *east* side of the Andes. Besides this very important transit trade, Valparaiso enjoys a large shipping trade from its own neighbourhood. Regular lines of sailing vessels supply this market with English goods.

WEST INDIAN TRADE.

This trade takes a most important place amongst English commerce, and embraces the West India Islands lying at the entrance of the Gulf of Mexico.

These islands are the storehouses of our rum, sugar, and molasses supply, and though they have barely recovered from the effects of altered social conditions produced by the emancipation of the slaves, there is but little land left uncultivated, and a future of unexampled prosperity seems to be assured in the prospect of the completion of the Panama Canal, which will place them in the direct highway of the commerce of the world.

The West Indian Islands are 65 in number, 54 being inhabited, the rest are bare rock; the produce (West Indian) is similar in all the islands, except Cuba, which has a monopoly of tobacco culture and cigar manufacture in the well-known "Havana" cigars.

Tobacco grown on other islands, or even the mainland, is shipped *to* Cuba, and re-exported as "Cuba" tobacco; still Cuba and Havana have the privilege of giving a standard to the tobacco trade and cigar manufacture.

Railway communication, etc.—Railway enterprise has been active in Cuba and Jamaica.

There is a line from Havana, right through the island, east and west, touching the coast at Matanzas, Cardenas, Sagua la Grande on the north—or same side as Havana—and Cienfuegos, on the south side; the central line runs down the island in the middle to the level of Cienfuegos.

The rest of Cuba, except for very short lines, is bare of rail, but the distance to one of the railway lines, or to the coast is so small, that from any given place, it is an easy matter to get produce to the sea-coast.

Jamaica has a small line from Kingston through Spanish Town to the old harbour.

The rest of the islands are very small, except Hayti, and transit is not difficult.

Jamaica averages 40 miles across, and is the largest of the islands, Cuba and Hayti only excepted, the latter being about 120 miles broad and 250 long; it is an independent state, but one of the least enterprising.

Principal Ports.—Many islands have only one port each respectively, named as the island on which it is situated.

Cuba.—Havana, Matanzas, Cardenas, Sagua-la-Grande, Puerto Principe, Santiago de Cuba (St. Jago), Manzanillo, Trinidad de Cuba, Cienfuegos and Gibara, with other smaller ports.

Porto Rico, Mayaguez, St. Juan, Aguadilla, Ponce, Arroyo, Guayanilla, and smaller ones.

Jamaica, Kingston (Port Royal), Black River, Old Harbour, Savanna-la-Mar, Lucea, Falmouth, Port Antonio, and others.

Hayti, Port-au-Prince, Cape Haytien, Samana, St. Domingo, and others.

Grand Cayman, George Town. *Virgin Island*, Tortola, &c.

St. Kitts. *Nevis.* *Antigua*, St. John's.

Dominica, Port Rupert, &c. *St. Lucia*, Port Castries, &c.

St. Vincent, Kingstown, &c. *Barbados*, Spanish Town, &c. *Grenada*, St. George, &c. *Tobago.* *Montserrat.*

Trinidad, Port Spain, &c. *Guadeloupe*, Point-a-Pitre, Basse Terre, &c. *Marie Galante. Martinique*, Port Royal, &c. *Sta. Cruz*. *Curaçao*, St. Anna. *Oruba. St. Thomas. St. John. Bahama Islands*, and many smaller ones.

Towns.—Most of the islands are too small for inland towns, and even *Cuba* can only boast of two or three important places off the sea-coast, Puerto Principe, St. Juan de los Remedios, Las Tunas, and Holguin.

Jamaica has several districts or divisions, with a capital town in each, but of small dimensions.

Hayti has Mirebalais and Dondon. *Trinidad*, Montserrat. Other villages are not worth recording.

Minerals.—Cuba possesses valuable copper mines, and a large quantity of this metal is exported, principally to the "States."

Gold is to be found. Some alum, bitumen, copperas, marble, slate, &c., are obtainable.

Coal has been discovered near Havana.

Hayti has antimony, bitumen, copper, gold, jasper, iron, quicksilver, platinum, silver, sulphur, &c.

Curaçao, salt and lime. *Porto Rico* has coal, copper, iron, gold, lead, and salt.

Redonda yields guano : *Sombrero* phosphate of lime, and *Trinidad* considerable quantities of asphalte, which is becoming a very important staple.

Jamaica gives cobalt, copper, gold, tin, platinum, and silver.

Anguilla yields salt and phosphate of lime. *Virgin Islands*, valuable copper, probably gold and other metals.

The people of the fifty-four inhabited islands are eminently agricultural and pastoral, and neglect this mineral wealth lying at their feet.

The *agricultural* produce of the whole range of islands consists of aloes, arrowroot, annatto, coffee, cotton, cattle, cassia, cocoa-nuts, castor oil plant, cedar, cabinet woods, cacao, cloves, capsicum, cassava, divi-divi, dye-woods, dyestuffs, drugs, breadfruit, fruits, fustic, flour, ginger, gum, ground nuts, hides, honey, indigo, Indian corn, limes, lime-juice, lignum vitæ, molasses, maize, nutmeg, logwood, pineapples, pimento, plantains, shaddocks, sarsaparilla, rice, sassafras, sweet potatoes, sugar, rum, tobacco, tamarinds, and wax.

Fishing—with turtles—is an important industry in some islands.

Bahamas are noted for their sponges.

Montserrat sends large quantities of finest limes and lime-juice to market.

The *Virgin Islands* have excellent pasturage.

Jamaica holds its superiority for rum, so well known as a first-class brand, "Jamaica Rum." Its coffee cannot be beaten; the finest pineapples are likewise grown.

The cultivation of cocoa in *Trinidad* is largely increasing.

English goods are introduced into all these Islands, both raw material, manufactures, machinery, and other commodities, in exchange for raw produce.

Transit.—By mail steamer; the distance from London being, to Antigua, 3830 miles; Barbadoes, 3805; Havana, 4190; and Jamaica, 4210 miles.

Centres.—Havana, the capital of the Island of Cuba, is one of the most important entrepôts and commercial ports of the West; it is a mail station, and in a direct line between England, the Mediterranean, and Mexico. It has one of the finest harbours in the world and can accommodate a large number of vessels.

Its staple industry is the manufacture of the well-known cigars; has also some small textile and confection work, but of little moment.

The exportation of "Havana" cigars and tobacco to all parts of the world is well known, and very extensive.

It is also a vast emporium for sugar, rum, and molasses, and with its transit trade, its own manufactures, and its shipping, may well rank high among Western commercial centres. Although it has coal in its own neighbourhood, it absorbs a fair quantity of the English product. As an emporium, it ships all Cuban produce and distributes all English and Spanish goods throughout the interior of the island by its railway lines.

ZANZIBAR TRADE.

The "natural or geographical division" of our last trade completes the circuit of the African continent, the "Mediterranean Trade," occupying the whole of the *northern* shore; the "West African Trade," the whole of the *western;* the "Cape Trade," the *southern;* and the Red Sea Trade, the *north-eastern* shores. The space between these two last named is now to be considered, and comprises the whole of the eastern coast of Africa from the Gulf of Aden to Delagoa Bay, and inland to the longitude of Tete and Lakes Nyassa, Sambura, &c., and the district of Ajan. The "Intermediate" African Zone lies to the westward of this imaginary line.

The eastern coast may be further subdivided into the "Ajan Coast," the "Zanzibar Coast," and the "Mozambique Channel."

This is a trade where commercial interchange has only recently assumed importance. The *climate* is generally good, but malaria and fevers are very prevalent, owing to the decomposition of vegetable matter, making these localities unhealthy for Europeans.

The soil is extraordinarily fertile, being productive especially of rice, spice, sugar, and other tropical commodities. Valuable freights of merchandise are now carried by first-class steamers between England, Zanzibar, Mozambique, and other parts of these districts.

The staple productions may be stated as spices, ivory, rice and beeswax.

From the Gulf of Aden, down to the equator, there is no trade, the country being sterile,—the district of Ajan is said to have an excellent breed of horses.

From here to Delagoa Bay, the country improves and a large trade is springing up.

The merchants, who live in the towns on the coast, send caravans into the interior, which return laden with produce.

The trade of Central Africa, the "Intermediate Zone" referred to, which is undoubtedly very valuable, should be carefully looked after; it is the opinion of competent authorities that the best commercial outlet for this most productive area, will be the southern portion of the African continent. It is affirmed that the making of a railway from Kimberley to the Zambesi is only a question of time, and when completed "the trade of an enormous and very rich area will be obtained."

Mashonaland, for instance, is rich in extensive mines of gold, iron and copper, and the people, it is said, are anxious to deal with English traders.

On the subject of opening up this Intermediate Zone, hear what the *Quarterly Review* says: "The gate to the heart of Central Africa is not through Khartoum, but through Bechuanaland, and it is to be hoped the Colonial Office will take care to keep it open." If this should result, it will materially affect the Mozambique portion of this area, by the river Zambesi; and also benefit the Cape, or South African trade in its north-east corner of Natal and Delagoa Bay.

This coast is divided, commercially, as follows: *Zanzibar* coast from Querimba to Magadoxa; and *Mozambique* from Querimba to Delagoa Bay.

Ports.—Magadoxa, Marka, Brava, Juba, Durnford, Melinde, Mombasa, Pemba, Zanzibar, Mafia, and Rovunna.

In the Mozambique channel, Querimba, Mozambique, Quilimane, which has a splendid transit with the interior by the river Zambesi, Inhambane, and Limpopo.

Towns.—None in Zanzibar district, except as transit places. The river Zambesi has the towns of Sena and Tete, emporium centres for the produce of the interior, sent down for final delivery at Quilimane.

Minerals.—Antimony, copper, and gold exist: coal and iron up the Zambesi river: Quilimane has an extensive supply of coal.

Agriculture, etc.—It is the custom for steamers trading here to call at *several* ports to pick up their cargoes.

Magadoxa district produces in rich abundance along the shores of the "Nile of Magadoxa" or Haines river, maize, millet, and rice: it has several harvests in the year, and is virtually the granary of this part: figs and other fruit are plentiful; it has also fine cattle and sheep.

The exports consist of cereals, gums, hides, home-spun cloth, ivory, myrrh, and cattle.

Port Durnford district is not yet worked, but is especially fertile, and well adapted for the highest and most profitable cultivation.

Mombasa district exports elephants' teeth, gum copal, horns, ivory, maize, rice, rhinoceros horns, and wax. The sugar-cane and banana grow luxuriantly, but like the rest of this coast, the uncivilised natives are deterrents to continuous and successful trade.

Zanzibar is the chief centre of the trade, and as an emporium exports antimony, coffee, cloves, cocoanuts, fruit, gold, gum-copal, hides, horns, ivory, indiarubber, oil, orchilla, manioc, millet, pepper, rice, sugar, sesamum, and wax. It has finest oranges among its fruits.

The country is extremely fertile and capable of highest culture.

This district is becoming the spice garden of the East, cloves especially, nutmegs and cinnamon too, being successfully cultivated. Coffee and cotton are grown.

In the Mozambique Channel steamers call for cargo *at all ports* and load amendoim, coir, copra, calumba-root, some gold, large quantities of ground-nuts, gergelim-seeds, india-rubber, ivory, kernels, manna, nuts, orchil, rice, and wax.

Transit is by mail steamer to Zanzibar, the distance from London by the Suez Canal being 6295 miles.

Centres.—Mozambique and Zanzibar; these towns have no local manufactures or trade, they are simply entrepôts for the produce from the interior which comes in by caravans, and the cargoes from other countries brought by sea. They are mail stations, and have direct correspondence with the Mediterranean and England.

EUROPEAN THOROUGHFARES.

In the foregoing "Natural Divisions of Commerce" it has been necessary, for the better grasping of the "divisions," to divide and subdivide the country or countries under consideration into various areas.

The "network" of railways *in each area* has been clearly laid down in the text, and it is possible to understand the whole means of communication in any given district; but, if an attempt be made to connect one area with another, which must necessarily be done in considering transport, it will be almost impossible to grasp the *total* of the *direct lines* in the mind's eye.

We therefore lay down as curtly as possible the main "trunk" lines of Europe, and thus give a chart, showing the means of transit from any one part of the Continent to any other.

It has been necessary, to save confusion, only to deal with *direct* means of communication.

Assume Europe were a dead flat and laid out in oblong shape, it will be seen that the great lines divide the country into squares, that is *five* west to east lines, divided at right angles by *six* north to south; but, inasmuch as the Continent is not a perfect oblong, the lines, necessarily, are not cut at right angles; but yet this definition holds good although the direction of some lines may be N.E., S.W., and so on.

In dealing with the great European lines, the word "*trunk*" as employed on the American continent has been used; but in reality there are no "trunk" lines in Europe, the definition of "trunk" being *a length of* one *railway stretching the whole distance between two given points.* And although in Europe the two extreme points are given, and a line traverses the whole of the intermediate space, still this length is made up of *several* lines worked by different companies, and not running throughout, under one direction (this is clear, if we consider the different nationalities traversed during their course); hence another term must be sought, and this is found under "link," "*International Link Lines.*"

We have said there are five west to east lines; these are:—

A. *Lisbon* to *Reggio*, *viâ* Madrid, Saragossa, Barcelona, Narbonne, Marseilles, Genoa, Rome, and Naples, a distance of 2329 miles.

A supplementary line to this, joining the main at Barcelona, is Alicante to Barcelona, *viâ* Valencia and Tarragona, a distance of 352¾ miles.

These link lines connect the whole Mediterranean seaboard with the Atlantic direct.

B. *Brest* to *Otranto*, uniting the Bay of Biscay and English Channel directly with the Mediterranean and Adriatic sea-board, *viâ* Paris, Dijon, Macon, Turin, Ancona and Brindisi, 1618½ miles.

C. *Brest* to *Bucharest*, directly linking the Bay of Biscay and Channel with the Danube, *viâ* Paris, Strasburg, Carlsruhe, Ulm, Munich, Vienna, and Pesth, a distance of 1952 miles; thence to Constantinople *viâ* Varna. The through trains on this run have earned the name of the "Orient

Expresses." As supplements to this main line are (α) Pesth to Constantinople *viâ* Belgrade, Nish, Philippopolis, a distance of 838¾ miles, but incomplete as yet between Nish and Saremby, 130 miles; (β) Pesth to Bucharest *viâ* Kronstadt, 561¼ miles; and (γ) Vienna to Cracow direct, 258¾.

D. *Brest* to *Orenburg*, *viâ* Paris, Metz, Frankfurt-sur-Maine, Prague, Warsaw, Brest-Litov, Wjasma, Tula, Riasch, Penza, and Orenburg: a distance of 3266½ miles; supplemented by continuing from Wjasma to Moscow and Nijnii Novgorod, making a distance of 2668 miles from Brest to Nijnii Novgorod. This line connects directly the east and west centrals of Europe. M. Bainier says, "The Nijnii Novgorod line will be prolonged to Ekaterineburg in Asia, and will some day no doubt go by the south of Siberia unto China." There does seem but little doubt that Asia will be directly entered both *viâ* Orenburg and Ekaterineburg (in fact Perm, in Russia, and the latter place already join by rail), and thus a through communication between Europe and Asia be established.

E. *Cadiz* to *St. Petersburg*, joining the Mediterranean at Gibraltar, the Atlantic with "the Bay" at Bayonne and Bordeaux, and the Baltic, *viâ* Seville, Madrid, Irun, Bayonne, Bordeaux, Paris, Cologne, Hanover, Stendal, Berlin, Wilna, Dunaburg, and St. Petersburg, being 3002½ miles.

The north to south lines are *six* in number, and as follows:—

F. *Calais* to *Marseilles*, *viâ* Paris, Dijon, Macon, and Lyons, being 720¾ miles, joining the North Sea and English Channel to the Mediterranean. This line cuts all the W. to E. lines, except A, at their common centre, Paris.

G. *Fredericia*, or we may rightly say *Drontheim*, in Norway, to *Genoa*, linking together the North Sea, Baltic, and Mediterranean, *viâ* Christiania or Stockholm, Elsinore, Copenhagen, Fredericia, Hamburg, Hanover, Frankfurt-s-

Maine, Basel, St. Gothard tunnel, and Turin, being 2219¾ miles *viâ* Christiania, and 2310½ *viâ* Stockholm. A supplement to this line is from the trans-channel port of Ostend through Brussels and Cologne, joining the main between Frankfurt and Basel. Ostend to Basel is 523¼ miles.

This main link line crosses route E at Hanover, D at Frankfurt-s-Maine, C close to Strasburg, and B at Turin.

H. *Stralsund* to *Trieste*, uniting the Baltic and Adriatic Seas, *viâ* Berlin, Dresden, Prague, and Vienna, being 962½ miles, connecting at Berlin with line E, at Prague with D, and at Vienna with C. Line B has a connecting link, Turin to Trieste, of 356¼ miles.

I. *Danzig* to *Odessa* or *Bucharest*, connecting the Baltic with the Black Sea and Danube, *viâ* Warsaw, Cracow, Lemberg, and Odessa, 1064¾ miles, or Lemberg, Czernowicz, and Bucharest, 1100 miles. This line crosses E at Dirschau, D at Warsaw, and joins C at Bucharest.

J. *Riga* and *Libau* to *Sevastopol*, joining the Baltic and Black Seas, *viâ* Wilna, Minsk, and Koursk, being 1463¼ miles, crossing line E at Wilna and D at Minsk. A supplementary line from Koursk to Odessa of 381 miles.

K. *Abo* to *Tiflis* for Batoum or Baku (227 and 335 miles distant west and east respectively), uniting the Gulfs of Bothnia and Finland with the Black Sea and Caspian, *viâ* St. Petersburg, Moscow, Riasch, Rostov, Vladicaucus, and Tiflis, 2167 miles, crossing line E at Moscow and Riasch.

A supplement to this line is Moscow to Sevastopol or Odessa. St. Petersburg to Sevastopol is 1312½ miles; and Odessa, 1095¾ miles. The Swedish border is now reached by rail joining the Abo line near Riihimaki.

There is a break in the Tiflis main line between Vladicaucus and Tiflis over the mountains of 133 miles.

There are two other short connecting lines uniting two of these great systems, namely, Bordeaux to Marseilles *viâ* Narbonne, 372 miles, joining lines A and E. And

Madrid to Alicante, 282¾ miles, connecting A and E at Madrid.

Regarding railways generally, M. Bainier says, "Railroads are more rare in Eastern Europe and in the peninsulas of the North and South. During the last ten years all the peoples of Europe have given vigorous impulse to the construction of railroads; nevertheless, Spain, Turkey, Greece, Russia, Sweden, and Norway have still very much to do to place them on a level with the others, which have only subsidiary or secondary lines to construct. It is in Belgium, England, Germany, and France that transport by railroad is greatest." Written in 1873.

Since the above was written, *Russia* has been laying down many lines, and connecting others, so that, as may have been seen, she now joins the extreme parts of her vast European Empire by means of railways. While *Norway* and *Sweden*, having regard to the mountainous character of these countries, have made such strides in railroad enterprise, that little more seems really to be desired, all the *important* places already join, and through routes are established, leaving only secondary or auxiliary lines to be laid down.

Other modes of transport are by internal and international waterways (rivers and canals) and roads.

Regarding *Roads*, M. Bainier remarks: "Europe has long been furrowed from north to south and from east to west, by routes practicable for every means of transport. More than 150,000 leagues of such routes, without reckoning neighbouring and secondary ones, exist.

"Still, Europe is far from being everywhere provided with good routes. The north-east and the south, and several mountainous regions of the centre, are in a great degree destitute of them. In the Spanish and Hellenic peninsulas, goods are for the most part transported on the backs of beasts of burden. In Scandinavia and the north of Russia, the most rapid and economical mode of transport is sleighing in the winter on the hardened snow or ice.

"Routes and carriage roads are most numerous, and kept in best order, in the north-west of Europe. England, the Low Countries, Belgium, France, and Germany, have the finest roads in Europe.

"Land-routes do not take, as they once did, the most prominent position amongst the means of transport. The establishment of railroads has placed them in the second rank, and several of them, formerly much frequented, occupy at present but a very inferior position. These are, especially, the great highroads that run parallel to trunk lines of railway."

We now come to consider the *Waterways* of Europe, the *rivers* and *canals.*

The former heads of Railways and Roads depend entirely upon local industries and passengers, or such sea-borne goods as may want a speedy delivery or collection; but the rivers and canals embrace, the former of course especially, *all imports and exports.* Every navigable river has its *port*, which acts as a feeder to the inland country, as well as an outlet, and helps to build up the transport service of the railways, which are projected first to the business points.

Working from *west* to *east*, SPAIN AND PORTUGAL, separated from the rest of the Continent by the Pyrenees, are precluded from *international* waterways, although the land-routes and railways join the Peninsula to the rest of Europe.

The *internal* navigation of these countries is but little developed. The rivers are—the *Ebro*, 420 miles in length, and navigable to Tudela, about 180 miles from the mouth. In conjunction with this river is the *Imperial Canal*, running from Tudela to Sastago or Rivaforada. It is made

A. *LISBON to REGGIO, 2329 Miles.*

1 Lisbon	to Madrid	412	
2. Madrid	,, Saragossa	211¾	
3 Saragossa	,, Barcelona .	227½	
4 Barcelona	,, Narbonne	171½	
5 Narbonne	,, Marseilles	143	
6. Marseilles	,, Genoa .	255½	
7 Genoa ..	,, Rome	299½	
8. Rome	,, Naples	161½	
9. Naples .	,, Metaponto .	169½	
10. Metaponto ..	,, Reggio .	267	
			2329
Supplements. α. Alicante	to Valencia ..	118¾	
β. Valencia	,, Tarragona ..	170¾	
γ. Tarragona	,, Barcelona .	63½	
		— —	352¾

B. *BREST to OTRANTO 1618¾ Miles*

1. Brest	to Paris .. .	387	
2 Paris .	,, Dijon .	196½	
3 Dijon	,, Macon	78¼	
4 Macon	,, Turin	224¾	
5 Turin	,, Brindisi	681¾	
6 Brindisi	,, Otranto	52¼	
		—	1618¾
Supplement. α.	Turin to Trieste		356½

C. *BREST to BUCHAREST, 1952 Miles*

1 Brest	to Paris	387	
2 Paris	,, Strasburg	302½	
3 Strasburg	,, Carlsruhe	57	
4. Carlsruhe	,, Ulm	114½	
5. Ulm	,, Munich	90½	
6 Munich	,, Vienna	292½	
7. Vienna	,, Pesth	171½	
8 Pesth	,, Bucharest	544¾	
		—	1952
Supplements. α. Pesth	to Belgrade	214¾	
Belgrade	,, Nish	161½	
Nish	,, Philippopolis	183	
Philippopolis	,, Constantinople	309½	
		—	868¾
β. Pesth	,, Kronstadt	452¾	
Kronstadt	,, Bucharest	108¼	
			561½
γ. Vienna	,, Cracow	258¾	258¾

D. *BREST to ORENBURG 3,266½ Miles*

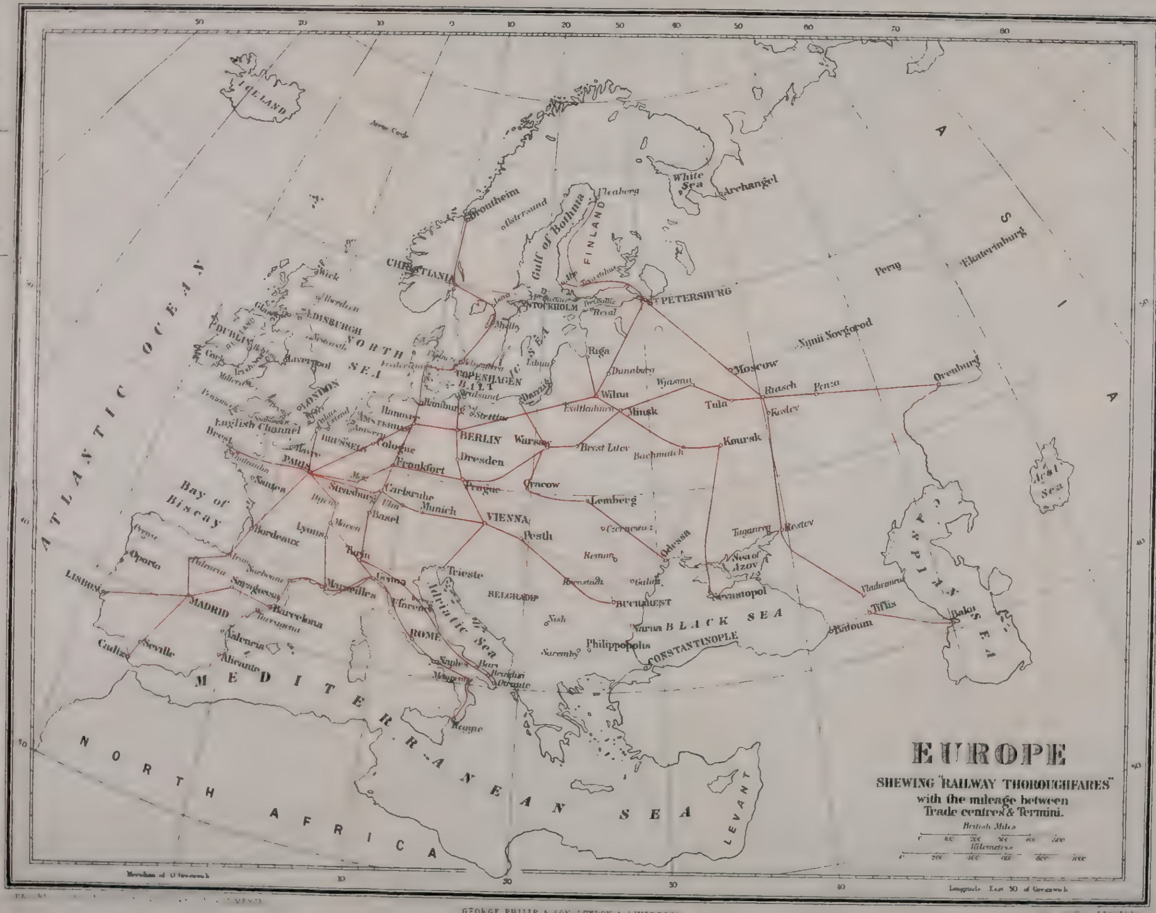
1. Brest	to Paris	387	
2. Paris	,, Metz	216½	
3. Metz	,, Frankfort	184½	
4 Frankfort	,, Prague .	340½	
5. Prague	,, Warsaw	402½	
	(Via Olmutz, Prerau, and Pless.)		
6. Warsaw	to Brest Litov .	132½	
7. Brest Litov	,, Wjasma	530	
8. Wjasma	,, Tula	172	
9. Tula	,, Riasch	116¾	
10. Riasch	,, Penza	224¾	
11. Penza . .	,, Orenburg .	511	
		—	3266½
Supplement α. Wjasma	to Moscow ..	152	
Moscow	,, Nijni Novgorod	274	
		—	426

E. *CADIZ to St PETERSBURG, 3002¼ Miles*

1. Cadiz ..	to Madrid	460½	
2. Madrid	,, Irun .	391¾	
3. Irun . ..	,, Bordeaux . . .	146¼	
4. Bordeaux ..	,, Paris	368¾	
5 Paris . .	,, Cologne ..	302½	
6. Cologne ..	,, Hanover .	204¼	
7. Hanover	,, Berlin	158½	
8 Berlin	,, Eydtkuhnen (frontier) ..	462½	
9. Eydtkuhnen	,, Dunaburg	213½	
10. Dunaburg .	,, St. Petersburg . ..	309½	
		—	3002¼

F. *CALAIS to MARSEILLES, 720¾ Miles*

1. Calais . .	to Paris	184½	
2. Paris ..	,, Dijon	195¼	
3. Dijon . .	,, Lyons	123	
4. Lyons ..	,, Marseilles .	216	
		—	720¾



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PAGES 355–359.

G. *DRONTHEIM to GENOA, 2219¾ Miles*

1. Drontheim ..	to Copenhagen .	960½	
2 Copenhagen .	,, Hamburg . ..	320¼	
3 Hamburg	,, Hanover	113	
4 Hanover	,, Frankfort S.-M .	227	
5. Frankfort	,, Basel . .	210¾	
6 Basel	,, Turin	278¾	
7. Turin . .	,, Genoa .	103¼	
		—	2219¾
Supplement α. Ostend	to Brussels . ..	75¼	
Brussels	,, Cologne .. .	130¾	
Cologne	,, Basel . .	307¾	
		—	523¾

H. *STRALSUND to TRIESTE 962¼ Miles.*

1. Stralsund	to Berlin	149¼	
2 Berlin .	,, Dresden	109	
3 Dresden	,, Prague . .	116¾	
4 Prague	,, Vienna	217¼	
5 Vienna ..	,, Trieste	370	
		—	962¼

I. *DANZIG to ODESSA 1064¾, BUCHAREST, 1100 Miles*

(a) 1 Danzig .	to Warsaw	183¾	
2 Warsaw .	,, Cracow	208	
3 Cracow	,, Lemberg	212½	
4 Lemberg ..	,, Odessa	460¼	
		—	1064¾
(b) 1 Danzig	,, Lemberg . . .	604	
2 Lemberg	,, Czernowitz	165¼	
3 Czernowitz	,, Bucharest .	330¾	
		—	1100

J. *RIGA and LIBAU to SEVASTOPOL 1463¼ Miles, ODESSA, 1246¼ Miles.*

1 Riga ..	to Wilna	200½	
	(Ex. Libau to Wilna 220½.)		
2. Wilna .	to Bachmatch . .	403	
3 Bachmatch	,, Koursk .. .	201¾	
4 Koursk .	,, Sevastopol . . .	607¾	
		— —	1463¼
Supplement α.	Koursk to Odessa	381	381

K. *ABO to TIFLIS, 2067 Miles*

1 Abo	to St. Petersburg	311	
2 St. Petersburg	,, Moscow ..	403	
3 Moscow	,, Riasch	181½	
4 Riasch	,, Koslov .	66½	
5. Koslov ..	,, Rostov . ..	518	
6. Rostov	,, Vladicaucus .. .	434	
7 Vladicaucus	,, Tiflis	153	
		— —	2067

Supplements.				
α. *Moscow to Odessa*	1. Moscow .	to Tula .	112½	
	2 Tula ..	,, Koursk .	199¼	
	3 Koursk ..	,, Odessa ..	381	
			—	692¾
β. *Moscow to Sevastopol*	1. Moscow ..	,, Koursk .	311¾	
	2. Koursk ..	,, Sevastopol	607¾	
			—	919½
γ. *Koursk to Rostov*	1. Koursk .	,, Taganrog.	465	
	2. Taganrog .	,, Rostov ..	46	
			—	511
δ. *Tiflis to Batoum*	.. . .		..	227
ε. *Tiflis to Baku*	. . . .		..	335

Supplements *BORDEAUX to MARSEILLES, 372 Miles.*

1. Bordeaux ..	to Narbonne . .	229	
2. Narbonne .	,, Marseilles . .	143	
		—	372

MADRID to ALICANTE, 282¾ Miles

LISBON to IRUN, via OPORTO and PALENCIA, 825¾ Miles.

1. Lisbon .	to Oporto .. .	209½	
2. Oporto ..	,, Orense	130½	
3 Orense ..	,, Palencia . .	261¼	
4. Palencia .	,, Irun	225½	
		—	825¾

PARIS to BASEL, direct, 328¾ Miles.

NANTES to BORDEAUX, 259 Miles.

NANTES to BREST 220 Miles.

Nantes ..	to Chateaulin	180	
Chateaulin ..	,, Brest	40	
		—	220

NANTES to PARIS, 246½ Miles.

AMSTERDAM to BRUSSELS, 119¾ Miles.

Amsterdam ..	to Antwerp	92¼	
Antwerp ..	,, Brussels	27½	
		—	119¾

parallel to the river, and avoids the many impediments in the river itself.

A canal is projected from Saragossa to Amposta, while the canal *San Carlos* joins Amposta and Port Alfagues, available a short distance, to Tortosa, for ships.

The *Lorca* Canal joins Carthagena with Benematurel, on the river Barbata, a tributary of the Guadiana, itself an affluent of the Guadalquiver, opening out a rich country.

The *Canal de Castile* unites the Ebro and Douro between Alar-del-Rey and Palencia.

Guadalquiver R., 290 miles, navigable to Seville, is the best for navigation in Spain. A very useful canal connects Seville with the port of Huelva. This waterway is of great service to ore transport.

Guadiana R., 450 miles, is only navigable to Mertola, 35 miles up.

Tagus R., 500 miles, navigable a short distance from the sea, between Abrantes, Santarem, and Lisbon.

Douro R., 460 miles, navigable for small vessels for 70 miles, and for light-drafted, flat-bottomed boats for 100 miles; connects with the River Ebro by the Canal de Castile.

There are no canals in Portugal. The rivers are spoiled for commercial purposes by the bad bars across their mouths. They could be improved without much cost and trouble, and would make an ample return. With regard to the Douro, Forester says, "It may be made navigable to Vilvestre."

FRANCE.—We now enter a country with magnificent waterways, connecting all parts of the empire in an uninterrupted course, and with *international* waterways also, so that it would be possible to start from Marseilles or Cette and touch the Atlantic seaboard, the central provinces, English Channel, Belgium, the Rhine, Germany, the Baltic, Black Sea, White Sea, and Caspian, without once putting foot on land, or going out to sea.

The *Rhone R.* has a course of above 500 miles, and is navigable from a short distance below the Lake of Geneva, or for a distance of about 360 miles. Difficulties of navigation are overcome by the canal from Arles to Bouc. It has two important auxiliaries, the Saône and Doubs, with courses of 280 and 200 miles respectively. The former, being navigable for about 190 miles, plays an important part in canal joining in central France; the latter of great assistance in joining the Rhone, or rather Saône, basin with that of the Rhine, is extensively used for floatage.

The *Garonne R.*, or, as it is called near the sea after union with the Dordogne, the *Gironde*, is, with its affluents, the most important river in France. It has a course of 300 miles, and is floatable for timber from the point where it enters France; it is navigable for boats to Cazéres, although its course is not *perfectly* clear above Marmande; its navigable affluents are the *Arriege*, with a course of 95 miles, navigable from Cintegabelle; the *Baise*, of 99 miles, from Nerrac, with the aid of sluices and locks; the *Dordogne*, 290 miles, from Mayronnes; the *Tarn*, 230 miles, from Alby; and the *Lot*, of 250 miles, from Entraygues.

The *Loire R.*, with a course of 570 miles, is navigable to Roanne, and receives many navigable affluents.

The *Loir R.*, 150 miles, is navigable for 80, and joins the Sarthe just north of Angers, continuing to the Mayenne (navigable from Laval), and finally joins the Loire.

The *Seine R.* has a course of 430 miles, and is navigable for flat-bottomed boats to Mery, just below Troyes; it receives many navigable affluents, amongst others the Aube, Yonne, Marne, Loing, &c.

The *Marne R.* has a course of 280 miles, and is navigable from St. Dizier, 210 miles, flowing past Chalons, Epernay, Meaux, &c., and finally joining the Seine.

The *Meurthe R.* is navigable from Nancy, and has a course of 100 miles, adding its waters to the Moselle.

Canals.—These assistants to navigation are most valuable, and connect one river with another; the canal system in France extends about 2350 miles, and comprises 86 in number. The five *principal* being:—

1. *Canal du Midi*, uniting the Garonne a little below Toulouse with the lagoon of Thau and the Aude river, has its outlet at Cette, thus directly joining the Atlantic and Mediterranean.

2. *Canal du Centre* or *Charollais*, uniting the rivers Loire and Saône, commences at Chalons-sur-Saône and runs to Digoin on the Loire. This system therefore unites in direct course the Atlantic and Mediterranean *viâ* the centre of the empire.

3. *Canal du Rhine et Rhone* connects these two fine waterways partly by the river Doub, a tributary of the Saône, itself an affluent of the Rhone. The canal runs from Baume just above Besançon to the Rhine at Strasburg and branches also to this river at Basel from Mulhouse.

Thus far we connect the Atlantic and Mediterranean, and effect an entrance into Germany and all N.W. Europe. By one more canal we unite these to the English Channel by the river Seine; this is effected by

4. The *Canal du Burgoyne*, which links together the Saône and Yonne, an affluent of the Seine; it runs from St. Jean de Losne, between Beaune and Dole, *viâ* Dijon to Roche-sur-Yonne close to Joigny.

5. The *Nantes to Brest Canal* (Chateaulin); this is the longest canal in France; it runs *viâ* Redon, Pontivy, &c.

There are many other smaller courses or auxiliaries, joining smaller rivers or diverging to towns. Amongst these notice may be taken of the following :—

The Canal *Cher*, in department of the same name, from Bourges to the main canal joining the Loire river and the Cher river, which runs from Briare on the Loire to St. Armand on the Cher.

The Canal *Loing* joins the Seine at Moret, just below Montereau, unites with the Loing river, a river much used in its upper course for floating timber, and in its lower reaches supplying the canals (Loing and Briare) with water; these two canals join Montereau (Moret) on the Seine, Montargis, Briare (on the Loire), Cosne and St. Armand, with branches to Chessy (Orleans) on the Loire from Montargis, to Bourges, as above noted, and to beyond Montluçon.

Canal du Nord traverses Flanders, Artois, &c., and joins Belgium to France, having its outlet at Gravelines. Canals *Calais*, *Ardres*, *St. Omer*, *St. Quentin*, *de la Somme*, &c., connect all these towns in N.E. France one with another, with Cambrai, Tournay, Lille, Valenciennes, and Belgium generally, on the one side; Abbeville, St. Valery, Amiens, &c., and the Oise R., an affluent of the Seine, through Soissons and Pontoise, on the other, thus opening up *general* water communication.

Canal Ardennes joins the rivers Aisne and Meuse.

The river *Charente* has a course of 200 miles, floatage from Civray, navigable from Montignac, and has two connecting canals, the *Brouage* (nav.) on the left and *Charras* on the right.

Canal Poitou joins the R. Charente with the Vivienne R., navigable from Chatellerault.

The towns of Rochelle and Niort connect by canal.

Canal Ille et Rance connects these two basins and unites the English Channel and Bay of Biscay in the north-west departments, and joins the Nantes and Brest canal by Canal *Vilaine*.

In department Morbihan, *Canal Blavet* follows the course of the river Blavet and joins Pontivy and Hennebont.

Department Sèvres has seven navigable canals, also the navigable rivers Sèvres, Niort, and Mignon.

The Rhone and Garonne further join by *Canal Beaucaire*, between Beaucaire and Aigues-Mortes and the sea, and by *Canal Etangs* between Aigues-Mortes and Cette (lagoon of Thau). Beaucaire, Arles, Tarascon, the Mediterranean at Port de Bouc, the river *Durance* are also connected by *Canal de Carponne.*

The *Canal Marne* joins the Rhine and Seine between Paris, Vitry, St. Dizier, and Strasburg.

But enough has been said to show how well France is supplied with every available means of transit and transport.

Belgium has the rivers Meuse (or Maas) and Scheldt, both navigable rivers, running through the country, the former having its outlet in the Netherlands: while the latter has a course of about 230 miles and is navigable from Condé.

The *Senne*, a tributary of the Scheldt, runs to Brussels. The *Meuse* in Belgium gives navigation to the important towns of Maestricht, Liége, Namur, and Dinant, and by its affluent, the Sambre, the town of Charleroi.

The *Waal R.* unites the rivers Rhine and Meuse, but not in Belgian territory.

The *Lys R.*, 130 miles, rises in France, runs past Menin and Courtrai, and joins the Scheldt at Ghent, being navigable for about 95 miles.

Canals extend about 300 miles, unite the rivers, connect with the sea at Ostend, and join France, the Netherlands, and Germany to Belgium in uninterrupted water communication.

Brussels and Antwerp join by *Canal Willbroek ;* this canal begins at Brussels and runs to the river Rupel, a navigable affluent of the Scheldt.

Canal Charleroi connects Brussels with the south and ends at its junction with the Sambre at Martignies-sur-Sambre, just above Charleroi.

Canal Bruges unites this town with the sea, Nieuport, the French coast and Ghent; while *Canal Ghent* unites Ghent with Terneusen on the Scheldt.

Limburg province is connected with the Netherlands by the *South Williams Canal*, between Maestricht and Hertogenbosch in North Brabant, with further connection to Bois-le-duc and Rotterdam, while another canal from Maestricht to Herenthals connects the Limburg province, that is the valley of the Meuse, Aix-la-Chapelle, &c., with Antwerp.

Canals join Belgium with France, from Mons to Condé, from the Scheldt to Roubaix, and from Furnes to Dunkirk and Calais.

Liége and Mons join by an extension of the Meuse Canal, as do also Charleroi and Mons.

Canal Liége to Treves joins the Meuse with the Moselle.

THE NETHERLANDS AND GERMANY.—The Netherlands are favoured with one of the finest European rivers, the Rhine, which has a course of about 700 miles, and is navigable for moderate-sized boats as far as Strasburg, for small steamers to Basel, and to below Schaffhausen for little boats. It is practically navigable at Coire, after receiving the waters of the Plessur.

The Rhine connects with the Rhone at Strasburg, and Basel by the Canal Rhine and Rhone; with the Meuse in its upper reaches by the canal joining this river with the Moselle, and lower down by the river Waal, through the town of Nymegen. The Meuse and north bank of the Scheldt also reach the sea in Holland; the former river has a course of 550 miles, and is navigable for 460; it has important affluents, amongst others, the Sambre and Waal, and gives a waterway to many large towns. Its course extends about 150 miles in France, 180 in Belgium, and 130 in Holland.

The Rhine, Scheldt, and Meuse divide into many branches near their mouths, and enter the sea under many various names.

Holland is a very flat country, and is intersected in all directions by canals, in fact it is not too much to say that every town and even village is connected by these waterways. The principal canals are:

Canal *Ymuiden and Nieudiep*, connecting the North Sea at Ymuiden with the Zuyder Zee at Amsterdam; this waterway is much used by vessels and steamers bound to Amsterdam, to avoid the extra passage round the Helder.

Canal *South Williams Vaart* joins the Meuse close to Hertogenbosch with Maestricht and Luik, and connects also with Bezel close to Roermond.

The *North Holland Canal* or *Canal du Nord*, connects Amsterdam with the Helder *viâ* Purmerend and Alkmaar; this canal by its tributaries joins Edam, Hoorn, and Enkhuizen with the sea.

Canal *Winschoten* unites Groningen and the Dollart *viâ* the Ems, and by the *Nieustadt canal*, a tributary, these districts with Veendam, Stadskanal, Rutenbroek, and Hareu.

Canal *Damster Diep* joins Groningen with the sea at Delfzwl; and canal *Drenscha* Groningen and Meppel, *viâ* Assen.

Groningen further connects with Harlingen by canal passing through Francke and Leeuwarden.

An auxiliary to canal Drensche, the *Orange* canal, serves Emmen, Hoogeveen, New Amsterdam, Koeverden, &c., and joins with the *Kolonel's Diep* and other canals, and so into Germany.

Canal *Diereusche* connects the Yssel R., near Doesburg, direct with Zwolle.

Canals *Schatkwijker wetering*, *Vaartsche Rhine*, *Vecht*, *Holendrecht*, *etc.*, unite in joining Utrecht and Amsterdam, and the former place with the Rhine at Wijk-bu-Duurstede.

Amsterdam and Rotterdam join by canal touching Haarlem, Leyden, Delft, and close to La Hague.

Leyden has a canal to the sea at Katwijk.

The *Oberyssel*, *Almeloosche*, *Ledemsvaart*, *etc.* canals join Deventer on the Yssel with Zwolle, Almeloo, Koevorden, Kampen, Zwartsluis, Meppel, &c.

The *International* canals with Belgium have already been given. The rivers Scheldt and Meuse join by a great number of canals.

The smaller watercourses might be continued, but enough has been said; all the canals in the Netherlands are navigable.

GERMANY has the greater part of the navigation of the Rhine within her borders.

The *Vistula R.*, with a course of 630 miles, is navigable from Cracow, and is of the greatest commercial importance. The *Oder R.*, 550 miles, is navigable at Breslau; the *Elbe R.*, the greatest commercial river of Germany, 700 miles, is navigable for about 470, but only for very flat-bottomed boats, owing to impediments in the bed of the river.

The *Weser R.* is only navigable for large vessels in its lower reaches, namely, to within 10 miles of Bremen.

The *Moselle R.*, joining the Rhine at Coblentz, has a course of 360 miles, and is navigable from its confluence with the Meurthe, a river running into France, and navigable from Nancy; the Moselle also receives the navigable affluents Sure and Sarre.

Canals.—The valleys of the Oder and Elbe are connected by the canal *Frederick-Wilhelmsgruben*, or *Müllerose*, and the river Spree, above Frankfort-sur-Oder.

Canal *Oder* or *Bromberg* joins the rivers Oder and Vistula by the Braa R., a tributary of the latter canal to Nakel on the Netz R., an affluent of the former.

Canal *Ludwig* connects the Rhine and Danube by the Rezat or by the Regnitz, an affluent of the Upper Maine, and the Altmühl, entering the Danube at Abensburg above Ratisbon. This waterway unites again the north with the south, and the Baltic with the Black Sea.

The Elbe and Trave unite by canal *Steckenitz* above Hamburg, which is suitable for small vessels, thus joining the North Sea and the Baltic.

Canal *Eider* unites Kiel and Tonning. The Rhine canals and connections have already been given.

RUSSIA.—We now approach a country which, for its vast extent, has an unexceptional facility of water transit. The country is flat, and consequently the rivers are sluggish and well adapted for commercial navigation. The number of rivers and tributaries is very large, and yet, in reality, they unite each with the other by canals and lakes. There is thus uninterrupted water communication by the *Maria* system between the White Sea, Black Sea, Baltic, and Caspian.

The principal rivers are, the *Volga*, with a course of 2200 to 2300 miles, and navigable throughout. It has an important tributary in the *Kama*, running 1000 miles, and also navigable throughout; and the *Mologa*, navigable from Ustujna. The ascent of the Volga is accomplished by steam tugs. This river, stretching right up and across Russia to the Valdai's, is the most important artery of the empire.

The *Ural R.* is not much used, but is navigable for about 550 miles out of 1150.

The *Don R.*, 1000 miles, is unfit for navigation owing to sandbanks, and yet by its connection by canals, &c., with the Volga, &c., it is one of the busiest of Russian rivers.

Petchora R., 900 miles, is the only river really having its outlet in the Arctic Ocean.

The *Dnieper R.*, 1200 miles, the *down* navigation for flat-bottomed boats bringing timber, &c., commences at Smolensk.

The *Dniester R.*, 600 miles, is navigable for the greater portion of its course, but is somewhat impeded by sand.

The *Niemen* or *Memel*, a very busy river, bringing down the well-known red deals, has a course of 400 miles, is navigable in all seasons, flows to the gov. of Minsk, and is of the utmost commercial importance, carrying nearly all the trade of Lithuania and Volhynia.

The *South Dwina R.*, 550 miles long, is navigable in the spring for the greater portion of its course, but at other times not above Wiliz.

The *Neva R.* is very short, being only 46 miles, but it is very important, as it is the outlet for the canals to the extensive shipping-port of Cronstadt.

The *Onega R.*, 300 miles, is not navigable, but still is much used for timber floating.

The *Dwina R.*, 760 miles long, floats timber throughout, and is navigable for 300 miles above Archangel.

The Russian lakes are numerous, and very useful in sustaining uninterrupted communication.

Canals.—Only some of these can be named, which join important basins.

Lake Onega, near St. Petersburg, connects that city by its affluent Vyterga and canal *Murinskoi* with the Koyla, an affluent of Lake Bieloe, and the *Volga* basin, by its tributary, the Scheksna, thus connecting the Caspian, the Dwina, and the Gulf of Finland. The other canals connected with these lakes and giving transit facility, are canals *Marie* and *Vyterga* to Svir.

Lake Ladoga is dangerous to navigation, and has therefore a canal along its shores, giving its affluent, the Volthov, a direct communication with the Neva R.

The Caspian Sea and Arctic Ocean join also by the Iujna-Keltma,—an affluent of the Kama, mingling with that river 170 miles N. by W. of Perm,—connecting by canal with the Siverna-Keltma, an affluent of the Dwina.

A canal connects the Suchona, a tributary of the Dwina, with Lake Bieloe, and through it the Neva R. : and another connects a second affluent, the Vitchegda with the Kama, thus establishing a further through communication.

The *Beresina R.*, navigable for nearly all its course of 250 miles, falls into the Dnieper, and unites, by canal of same name, with the Dwina.

From St. Petersburg the canals *Moika*, *Catherina*, and *Fontanka* stretch east and west.

Canal *Ivanovska* joins the Don and Upa. Canal *Vishnei-Volotchok* connects Tver on the Volga with the Msta R., thus uniting the Volga and the Neva. While canal *Novgorod* unites the Msta, Volthov, and Lake Ilmen.

Canal *Tikhvin* connects, through Lake Ladoga and the Volga, the Caspian and the Baltic Seas.

Canal *Oginski* joins the Pripet and the Niemen. Canal *Royal* unites the Pripet, which is a tributary of the Dnieper, with the Bug, an affluent of the Vistüla; thus introducing *International* communication.

Canal *Tellin* connects the Gulf of Livonia with Lake Peipous: and canal *Saima* unites the Gulf of Finland with lake Saima.

Winter necessarily suspends all *water* communication, and converts these arteries into magnificent highways, the rapid sleigh replacing the steamboat.

Norway has neither commercial rivers nor canals, its many fiords, running in places for miles into the country, supply means of water transit. The *Glommen R.* connects Drontheim with the Skager Rack by the lakes.

The *Logan R.* enters the head of Lake Mjosen, and communicates through lake Lesjö with a stream flowing through the Romsdal valleys into the Atlantic; this gives another continuous water-channel between the Atlantic and Skager Rack.

SWEDEN has many rivers running into the Baltic from the mountains, but none of them are commercially navigable beyond a few miles from their mouths, although their whole courses are extensively used for the floatage of timber.

Lakes are numerous, and in many instances connect with each other by stream or canal; the *Gotha* canal is well-known, and joins the river Gotha, Lakes Wener and Wetter, by the canal *Gotha* and continued by canal *Motala* from Motala on Lake Wetter to Soderköping; through water communication is thus formed from the Cattegat to the Baltic by the towns of Gothenburg, Wenersborg, Carlstadt, Mariestadt, Jonköping, Linköping, and Soderköping.

The *Dal* gives communication with Lake Siljan, while lakes Mälar and Hjelmar also join: the former lake being of great importance commercially, it joins the Baltic, by canal, in the bay of Sodertelje.

The rivers in the north in every instance are the outcome of lakes lying a short distance from the mountains and are of the greatest service in collecting and bringing down the wood.

The chief rivers are the Tornea, Calix, Lulea, Pitea, Skelleftea, Vindel, Umea and Angermann,—this being the only river at all approaching navigability for any distance,—Indals, Ljusne and the Dals.

AUSTRO-HUNGARY.—This country, including Bavaria, Austria, Moravia, Hungary, Transylvania, Styria, Bosnia, Servia, Wallachia, Moldavia, Roumania and Bulgaria, is entirely within the basin of the Danube, the most important commercial artery in Europe; although the Volga would run it very closely had it an outlet into an open sea instead of one land-locked like the Caspian.

There is in all this district hardly necessity for canals, the Danube and tributaries giving unbounded water accommodation: the Danube itself is navigable below Ulm, and receives during its course of 2400 miles upwards of 60 navigable tributaries, and all important for floatage; the principal being the Drave, March, Inn, Save, Theiss, Maros, Altmühl, Kulpa, Morava, Alutha, Sereth, Pruth, &c.

The Danube connects with the Rhine by the canal *Ludwig viâ* the Altmühl.

As before stated canals are not numerous and are mainly confined to the lower parts of the Hungarian plains, where they serve irrigation purposes.

GALICIA is watered by the *Vistula*,—the Carpathian mountains divide the north and south basins.

BOHEMIA and UPPER AUSTRIA are served by the *Elbe* river, which is navigable from its junction with the Moldau; the latter, navigable as far as Budweis, forms an important artery connecting Bavaria, Central Germany, Saxony and Hamburg.

Lake *Balaton* in the centre of Hungary connects with the Danube by canal.

In the south, Trieste has no harbour, but is favoured with a deep canal penetrating the heart of the town.

Canal *Francois* joins the Danube and Theiss river; canal *Béga* the Theiss R. and Temesvar; and canal *Vienna* and *Neustadt* unites the Danube and Kerbach.

TURKEY has no rivers or streams of commercial importance, neither has it any canals. The northern portions of Turkey belong to the Danube basin; and the province of Adrianople is the only one that can boast the slightest pretence to a commercial river, the Maritza, navigable when in flood, to Adrianople.

Greece is so near the sea in all its borders, that there is no occasion to provide *internal* waterways; there are neither navigable rivers nor canals.

Italy is prevented by the Alps from enjoying *international* water communication, but the plain of Lombardy and the whole kingdom are well watered.

The rivers are the *Arno*, with a course of 150 miles, and navigable from near Florence; the navigation is, however, much hindered by a bar.

The *Tiber R.*, 230 miles, navigable for about 90 from its confluence with the Nera.

The *Po R.*, 450 miles long and navigable for barges for about 390 miles, from its confluence with the Ticino; the navigation is difficult owing to rocks, rapids, variety of depth, &c.

The *Adige R.* has a course of 250 miles, and its embouchure with the Po, is navigable from Verona, and, like the other rivers, is very rapid.

The *Arno* and *Tiber* unite by *canal* in their upper courses.

All the Italian rivers are liable to sudden changes in depth, current, &c. from the melting of the snow or heavy rains swelling the auxiliary torrents running down the mountains, consequently the commercial activity of Italian rivers is but insignificant.

The navigation of the lakes of Lecco, Como, Maggiore, &c., shows life and gives some transit to and from the neighbouring countries, by means of the outlet streams and canals.

Canal *Grand* runs from the Ticino to the Olona, connecting Milan and the lakes with the Po.

Canal *Pavia* runs between Milan and Pavia; canal *Muzza* by the course of the Adda R.; Canal *Nartesana* joins Milan and the Adda; canal *Pisa* to *Leghorn* avoids the difficulties of river transit.

SWITZERLAND is, amongst its glaciers, the source of some of the principal rivers already mentioned, namely the Rhine, Rhone, and Inn,—an affluent of the Danube. Its lakes, too, fed by the mountain streams, assume a commercial importance, giving ease of transit from place to place.

Lakes *Geneva*, the home of the Rhone (which, as a river, is not however navigable in Swiss territory); *Constance*, of the Rhine, and close to the source of the Danube; *Lucerne*, *Zurich*, *Neufchâtel*, *Thun*, &c., all show considerable commercial activity.

Canal *Linth* connects Lake Zurich with the Wallenstatter-See.

Canal de l'Aar unites Berne with the lake of Thun. Canals also join lakes Morat, Neufchâtel, and Bienne with the river Aar; and thus complete our circle of European *national* and *international* waterways.

AMERICAN THOROUGHFARES.

The second map, of North American "Thoroughfares," may assist the mind of a reader in grasping the "Trunk" and "Link" lines of this continent. Within so small a limit, it is impossible to lay down either the sites of industrial centres or the course of the leading railways with *geographical* accuracy; but they are practically correct, and all distances are from the latest time-tables or other valid authorities.

The course of trade has occasioned railway centres in various parts of the continent,—*i.e.*, places through which many lines of rail pass:—among these *Chicago* takes a first rank, its convenient position on the lakes giving it an immense advantage.

Among others may be mentioned St. Louis,—having also a most extensive river trade,—Cincinnati, Kansas City, Louisville, Pittsburg, Albany, and many more. Each of these centres might be taken as a starting point in considering American railways.

Railways.—Following the same plan as in the European "Thoroughfares" of considering the through east to west lines intersected by north and south lines, we note:—

1. The only "trunk" line in America, connecting directly the Atlantic with the Pacific, is the one running throughout

in British territory, and styled the "Canadian Pacific Railway."

This line, besides opening up some of the richest fields in the world, whether agricultural or mineral, unites our kingdom with India, Australia, China and the East generally, *viâ* Vancouver, and saves many miles from the oversea route *viâ* the Suez Canal.

The line starts from Montreal or Quebec and, skirting the northern shore of the lakes, runs through Manitoba, the North-West Territories, and British Columbia to Port Moody or Vancouver,—a great centre of the lumber trade, —a through distance of 2906 statute miles from Montreal.

Quebec, *viâ* Montreal, is in direct rail communication with Halifax, Boston, Portland, and New York.

2. Duluth, at the western extremity of Lake Superior, to Portland (Oregon), by the North Pacific *viâ* Fargo, Helena, Umatilla, a distance of 1957 miles.

3. New York to San Francisco, *viâ* Chicago and the Union Pacific, a distance of 3316 miles, or by the very shortest combination of "link" lines, 3150 miles; or New York to Portland (Oregon),—a rich grain-bearing district,— by the same route, branching at Green River City, being 3318 miles.

4. New York to Mojave, on the North and South Pacific Coast line, *viâ* Indianapolis, St. Louis, and Albuquerque, a distance of 2734 miles.

5. Brunswick to Los Angeles, being a *southern* east to west line, *viâ* Montgomery, Jackson, El Paso del Norte,— a Mexican frontier town,—and Yuma, a distance of 2332 miles. This line traverses the rich pastures of Texas.

Boston, Baltimore, Philadelphia, or Washington, might equally be the *western* starting point with New York, as the lines from all these ports converge at one of the "centres."

The great north to south lines may be stated as :—

1. Tacoma or Olympia to San Diego, 1399 miles, running parallel with the Rocky Mountains and the Pacific Ocean the whole way, and traversing some of the finest corn districts of the Union, besides serving the great city sea-port of San Francisco, and the gold fields of California.

2. Cheyenne City or Helena to Mexico, opening out the central States and running *viâ* Salt Lake City, Denver, Albuquerque, El Paso del Norte, and Chihuahua to Mexico City, a distance of 2055 miles from Cheyenne.

3. Omaha direct to Galveston, *viâ* Kansas City, 992 miles.

4. Winnipeg to New Orleans, *viâ* Fargo, Chicago, Cairo, and Memphis, being 1909 miles.

5. Chicago to Pensacola, *viâ* Louisville and Montgomery, 981 miles.

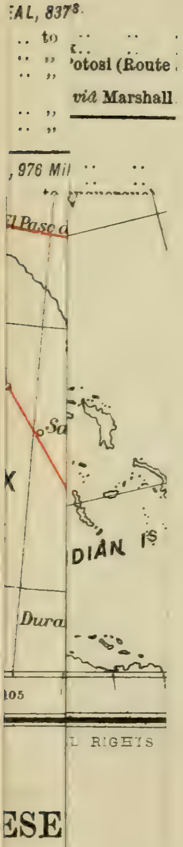
6. Boston to Brunswick, *viâ* Albany, Elmira, Cincinnati and Atlanta, being 1553 miles, and extended to Florida.

A great link line runs from New York to Mexico City N.E. to S.W., a distance of 3861 miles, *viâ* Chicago, Kansas City, Albuquerque, El Paso del Norte, Chihuahua and the centre of the country to the City of Mexico, thence continuing to the sea coast at Vera Cruz on the Gulf of Mexico.

This line opens up most fertile tracts of land and goes far to assist in transporting the buried riches of Mexico.

The ramifications of railways on this continent are so numerous, it would be impossible to particularise all, but the accompanying map will aid in working out any route and give the approximate distance.

Rivers.—The rivers of North America take rank with the finest in the world, but climatic differences are not so perceptible on the American continent as in that of Asia, for whereas in the latter, the finest waterways have their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1 CANADIAN PACIFIC
MONTREAL to VANCOUVER 2906 Miles

	From		To	Miles	Total
	Montreal	to	Ottawa City	120	
	Ottawa	,,	Fort William	880	
	Fort William	,,	Winnipeg	423	
	Winnipeg	,,	Port Moody	1469	
	Port Moody	,,	Vancouver	14	2906
Supplements. α.	Montreal	to	Quebec	172	
β.	,,	,,	Portland	297	
γ.	,,	,,	Albany	223	
δ.	,,	,,	Boston	305	
ε.	,,	,,	New York	364	

2 NEW YORK to SAN FRANCISCO, 3316 Miles

	From		To	Miles	Total
	New York	to	Elmira	274	
	Elmira	,,	Buffalo	149	
	Buffalo	,,	Detroit	260	
	Detroit	,,	Chicago	276	
	Or, New York	,,	Pittsburg	330	
	Pittsburg	,,	Chicago	452	782
	Chicago	,,	Davenport	182	
	Davenport	,,	Omaha	319	
	Omaha	,,	Cheyenne City	516	
	Cheyenne City	,,	Green River City	329	
	Green River City	,,	Ogden	187	
	Ogden	,,	Sacramento City	744	
	Sacramento City	,,	San Francisco	91	3316
Supplements α.	Omaha	,,	Denver City	563	
β.	,,	,,	Kansas City	178	

3 NEW YORK to MOJAVE (for San Pedro), 2734 Miles

	From		To	Miles	Total
	New York	to	Pittsburg	330	
	Pittsburg	,,	Indianapolis	364	
	Indianapolis	,,	St. Louis	241	
	St Louis	,,	Vinita	323	
	Vinita	,,	Isleta (Albuquerque)	715	
	Isleta	,,	Barstow	695	
	Barstow	,,	Mojave	66	2734
Supplement.	Mojave	,,	San Pedro	141	

4 NEW YORK to MEXICO CITY 3861 Miles

	From		To	Miles	Total
	New York	to	Davenport (Route 2)	1131	
	Davenport	,,	Kansas City (Topeka)	339	
	Kansas City	,,	La Junta	504	
	La Junta	,,	Albuquerque (Isleta)	307	
	Albuquerque	,,	El paso del Norte (frontier)	205	
	El paso del Norte	,,	Chihuahua	225	
	Chihuahua	,,	Lerdo	290	
	Lerdo	,,	San Juan del Rio	590	
	San Juan del Rio	,,	Mexico	120	3861
Supplements. α.	Mexico	to	Vera Cruz		225
β.	Topeka (Kansas City)	,,	Denver City		539
γ.	Cheyenne City	,,	Denver City	90	
	Denver City	,,	Pueblo	120	
	Pueblo	,,	El Moro	81	300

5 NEW YORK to AUSTIN and SAN LUIS POTOSI (Mexico), 2371 Miles

	From		To	Miles	Total
	New York	to	Philadelphia	82	
	Philadelphia	,,	Baltimore	105	
	Baltimore	,,	Cincinnati	440	
	Or, New York	,,	Pittsburg	330	
	Pittsburg	,,	Cincinnati	278	608
	Cincinnati	,,	Louisville	110	
	Louisville	,,	Memphis	377	
	Memphis	,,	Little Rock	131	
	Litle Rock	,,	Austin	485	
	Austin	,,	Laredo (frontier)	225	
	Laredo	,,	Monterey	141	
	Monterey	,,	San Luis Potosi A few miles unfinished.	275	2371
	San Luis Potosi	,,	Tampico	230	

6 NEW YORK to NEW ORLEANS, 1275 Miles

	From		To	Miles	Total
	New York	to	Baltimore (Route 5)	187	
	Baltimore	,,	Washington	37	
	Washington	,,	Knoxville	458	
	Knoxville	,,	Chattanooga	100	
	Chattanooga	,,	New Orleans	494	1276

7 NEW YORK to PENSACOLA, 1341, TAMPA (Florida), 1271 Miles

	From		To	Miles	Total
α.	New York	to	Washington (Route 6)	224	
	Washington	,,	Wilmington	323	
	Wilmington	,,	Columbia	181	
	Columbia	,,	Savannah	131	
	Savannah	,,	Pensacola	452	1341
β.	New York	,,	Savannah (Route 7a)	909	
	Savannah	,,	Jacksonville	186	
	Jacksonville	,,	Tampa	176	1271
Supplement	Jacksonville	,,	Cedar Keys	114	

8 TACOMA (Olympia) to SAN DIEGO, 1399 Miles.

	From		To	Miles	Total
	Tacoma	to	Portland	145	
	Portland	,,	Salem	53	
	Salem	,,	Oakland	131	
	Oakland	,,	Sacramento City	425	
	Sacramento City	,,	Lathrop	61	
	Lathrop	,,	Mojave	292	
	Mojave	,,	Los Angeles	115	
	Los Angeles	,,	Colton	58	
	Colton	,,	San Diego	119	1399
Supplement.	Lathrop	,,	San Francisco	94	

9 PORTLAND (Oregon) to CHARLESTON, 3195 Miles

	From		To	Miles	Total
	Portland	to	Umatilla	187	
	Umatilla	,,	Caldwell	333	
	Caldwell	,,	Pocatello	252	
	Pocatello	,,	Ogden	136	
	Ogden	,,	Salt Lake City	38	
	Salt Lake City	,,	Pueblo	453	
	Pueblo	,,	La Junta	56	
	La Junta	,,	Kansas City	564	
	Kansas City	,,	Memphis	438	
	Memphis	,,	Atlanta	445	
	Atlanta	,,	Charleston	289	3195
Supplement	Caldwell	,,	Boise City	14	

10. LOS ANGELES to BRUNSWICK, 2332 Miles.

	From		To	Miles	Total
	Los Angeles	to	Colton	58	
	Colton	,,	Yuma	201	
	Yuma	,,	Tucson	275	
	Tucson	,,	El paso del Norte	205	
	El paso del Norte	,,	Dallas	688	
	Dallas	,,	Jackson	399	
	Jackson	,,	Montgomery	240	
	Montgomery	,,	Brunswick	366	2332

11. PHILADELPHIA to PORTLAND (Oregon), 3212 Miles

	From		To	Miles	Total
	Philadelphia	to	Pittsburg	273	
	Pittsburg	,,	Chicago	452	
	Chicago	,,	Minneapolis	521	
	Minneapolis	,,	Fargo	229	
	Fargo	,,	Helena	879	
	Helena	,,	Umatilla	671	
	Umatilla	,,	Portland	187	3212

12. DULUTH to GALVESTON, 2022 Miles.

	From		To	Miles	Total
	Duluth	to	St. Paul	158	
	St Paul	,,	Davenport	711	
	Davenport	,,	Kansas City	339	
	Kansas City	,,	Dallas	502	
	Dallas	,,	Galveston	312	2022

13. CHICAGO to MONTREAL, 837 Miles

	From		To	Miles	Total
α.	Chicago	to	Detroit	276	
	Detroit	,,	Toronto	228	
	Toronto	,,	Montreal	333	837
β.	Chicago	,,	Port Huron	335	
	Port Huron	,,	Montreal	502	837

14 CHICAGO to BOSTON, 976 Miles

	From		To	Miles	Total
	Chicago	to	Detroit	276	
	Detroit	,,	Buffalo	250	
	Buffalo	,,	Albany	285	
	Albany	,,	Boston	165	976

15 CHICAGO to NEW YORK, 949 Miles

	From		To	Miles	Total
α.	Chicago	to	Buffalo (Route 14)	526	
	Buffalo	,,	Elmira	149	
	Elmira	,,	New York	274	949
β.	Chicago	,,	Toledo	232	
	Toledo	,,	Elmira	383	
	Elmira	,,	New York	274	889
γ.	Chicago	,,	Pittsburg	452	
	Pittsburg	,,	New York	330	782
δ.	Chicago	,,	Port Huron	335	
	Port Huron	,,	Buffalo	201	
	Buffalo	,,	New York	453	989

16. CHICAGO to CINCINNATI, direct, 271 Miles.

17 CHICAGO to PHILADELPHIA, 725 Miles.

	From		To	Miles	Total
	Chicago	to	Pittsburg	452	
	Pittsburg	,,	Philadelphia	273	725

18. CHICAGO to WILMINGTON, 1015 Miles.

	From		To	Miles	Total
	Chicago	to	Louisville	328	
	Louisville	,,	Knoxville	260	
	Knoxville	,,	Wilmington	427	1015

19. CHICAGO to PENSACOLA, 981 Miles.

	From		To	Miles	Total
	Chicago	to	Louisville	328	
	Louisville	,,	Nashville	186	
	Nashville	,,	Montgomery	304	
	Montgomery	,,	Pensacola	163	981

20. CHICAGO to NEW ORLEANS, 941 Miles.

	From		To	Miles	Total
	Chicago	to	Cairo	363	
	Cairo	,,	Memphis	171	
	Memphis	,,	Jackson	212	
	Jackson	,,	New Orleans	195	941

21. CHICAGO to SAN LUIS POTOSI, 1739 Miles

	From		To	Miles	Total
	Chicago	to	St Louis	292	
	St Louis	,,	Little Rock	321	
	Little Rock	,,	San Luis Potosi (Route 5)	1126	1739
Supplement	Little Rock	,,	Galveston, viâ Marshall	503	

22 CHICAGO to MOJAVE, 2091 Miles.

	From		To	Miles	Total
	Chicago	to	St Louis	292	
	St Louis	,,	Vinita	323	
	Vinita	,,	Isleta (Albuquerque)	715	
	Isleta	,,	Mojave (Route 3)	761	2091

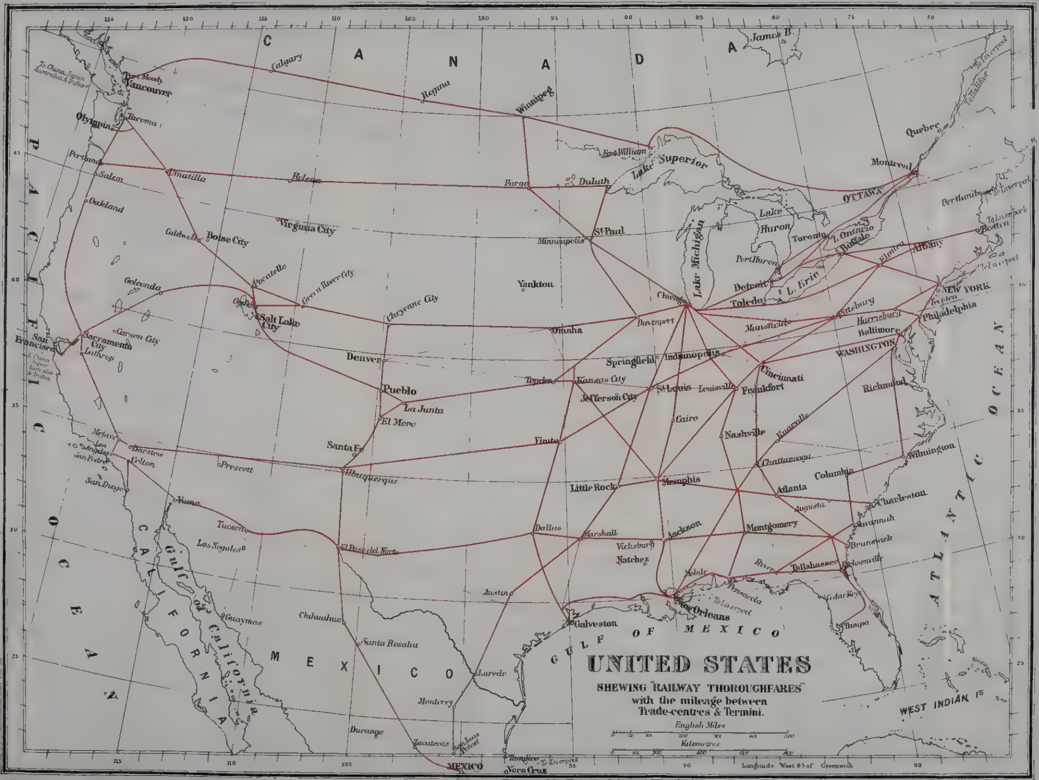
23 CHICAGO to SAN FRANCISCO, via SALT LAKE, 2466 Miles.

	From		To	Miles	Total
	Chicago	to	Davenport	182	
	Davenport	,,	Kansas City (Topeka)	339	
	Topeka	,,	La Junta	564	
	La Junta	,,	Pueblo	55	
	Pueblo	,,	Salt Lake City	458	
	Salt Lake City	,,	Ogden	38	
	Ogden	,,	San Francisco (Route 2)	835	2466

24 CHICAGO to SAN FRANCISCO, via OMAHA and CHEYENNE CITY, see Route 2, 2367 Miles

25. CHICAGO to PORTLAND (Oregon), via CHEYENNE CITY, 2369 Miles

	From		To	Miles	Total
	Chicago	to	Davenport	182	
	Davenport	,,	Green River City (Route 2)	1163	
	Green River City	,,	Pocatello	247	
	Pocatello	,,	Portland (Route 9)	777	2369



UNITED STATES

SHEWING "RAILWAY THOROUGHFARES"
with the mileage between
Trade-centres & Termini.

26. CHICAGO to PORTLAND (Oregon), via FARGO, 2487 Miles, TACOMA 2522 Miles

	From		To	Miles	Total
	Chicago	to	Fargo, Helena Umatilla (Route 11)	2300	
	Umatilla	,,	Portland	187	2487
	Umatilla	,,	Tacoma	222	2522
Supplement.	Helena	,,	Pocatello	295	
	Pocatello	,,	Ogden	136	431

27 CHICAGO to WINNIPEG, 968 Miles

	From		To	Miles	Total
	Chicago	to	Minneapolis	521	
	Minneapolis	,,	Fargo	229	
	Fargo	,,	Winnipeg	218	968

28. CHICAGO to DULUTH, 687 Miles

	From		To	Miles	Total
	Chicago	to	St Paul	529	
	St Paul	,,	Duluth	158	687

29 CINCINNATI to BALTIMORE direct, 440 Miles

30 CINCINNATI to NEW YORK 608 Miles

	From		To	Miles	Total
α.	Cincinnati	to	Pittsburg	278	
	Pittsburg	,,	New York	330	608
β.	Cincinnati	,,	Pittsburg	278	
	Pittsburg	,,	Elmira	235	
	Elmira	,,	New York	274	787
γ.	Cincinnati	,,	Baltimore	440	
	Baltimore	,,	Philadelphia	105	
	Philadelphia	,,	New York	82	627
δ.	Cincinnati		Mansfield	179	
	Mansfield	,	Elmira	409	
	Elmira	,	New York	274	862

31 CINCINNATI to MONTREAL 918 Miles, BOSTON, 860 Miles

	From		To	Miles	Total
	Cincinnati	to	Elmira (Route 30β)	513	
	Elmira	,,	Albany	182	
	Albany	,,	Montreal	223	918
	Albany	,,	Boston	165	860

32 CINCINNATI to BRUNSWICK 693 Miles

	From		To	Miles	Total
	Cincinnati	to	Chattanooga	308	
	Chattanooga	,	Atlanta	118	
	Atlanta	,,	Brunswick	267	693
Supplement	Atlanta	,,	Charleston	289	

33 NEW ORLEANS to GALVESTON, direct 439 Miles

34 NEW ORLEANS to JACKSONVILLE 622 Miles

	From		To	Miles	Total
	New Orleans	to	Mobile	141	
	Mobile	,,	Pensacola	105	
	Pensacola	,,	Tallahassee	206	
	Tallahassee	,,	Jacksonville	170	622

35 NEW ORLEANS to SAVANNAH, 673 Miles

	From		To	Miles	Total
	New Orleans	to	Pensacola (Route 34)	246	
	Pensacola	,,	River	161	
	River	,,	Savannah	266	673

36 NEW ORLEANS to DALLAS, direct, 523 Miles

37 DENVER CITY to WILMINGTON, 1797 Miles

	From		To	Miles	Total
	Denver	to	Topeka	530	
	Topeka	,,	St Louis	308	
	St Louis	,,	Louisville	263	
	Louisville	,	Wilmington	687	1797

38 Circular Route via the Coast, MONTREAL to TACOMA 5574 Miles

	From		To	Miles	Total
	Montreal	to	Boston	305	
	Boston	,,	New York	213	
	New York	,,	Philadelphia	82	
	Philadelphia	,,	Baltimore	105	
	Baltimore	,,	Washington	37	
	Washington	,	Wilmington	323	
	Wilmington	,,	Savannah	352	
	Savannah	,,	Brunswick	101	
	Brunswick	,,	Jacksonville	150	
	Jacksonville	,,	Pensacola	376	
	Pensacola	,,	Mobile	105	
	Mobile	,,	New Orleans	141	
	New Orleans	,,	Galveston	439	
	Galveston	,,	Los Angeles	1489	
	Los Angeles	,,	San Francisco	501	
	San Francisco	,,	Portland	700	
	Portland	,,	Olympia 112		
	,,	,,	Tacoma	145	5574

From these Distances and Routes any combination or combinations of Routes can be easily calculated

OCEAN ROUTES

From		To	Via	Distance		
Quebec	to	Liverpool	viâ Straits of Belle Isle	3060	statute	miles
,,	,,	Montreal	,, River St Lawrence	145	,,	,,
Portland	,,	Liverpool	,, Cape Race & Malin Head	2759	geographical	,,
Boston	,,	,,	,, ,,	2800	,,	,,
New York	,,	,,	,, ,,	3002	,,	,,
,,	,,	,,	,, Sandy Hook and South Ireland	3010	,,	,,
Port Moody (Vancouver)	to	Yokohama		4374	,,	,,
,,	,,	,, Liverpool	viâ Cape Horn	14400	,,	,,
,,	,,	,, Hongkong		5936	,,	,,
,,	,,	,, Fiji		5100	,,	,,
,,	,,	,, Sandwich Isles		2409	,,	,,
,,	,,	,, Auckland		6934	,,	,,
,,	,,	,, Sydney		7434	,,	,,
San Francisco	to	Yokohama		4470	,,	,,
,,	,,	Hongkong		about 6400	,,	,,
,,	,,	Singapore		,, 7850	,,	,,
,,	,,	Calcutta		,, 9000	,,	,,
,,	,,	Honolulu		,, 2100	,,	,,
,,	,,	Auckland		,, 6050	,,	,,
,,	,,	Sydney		,, 7200	,,	,,
,,	,,	Melbourne		,, 7740	,,	,,
,,	,,	Adelaide		,, 8100	,,	,,
New Orleans	,,	Liverpool		,, 4617	,,	,,
Vera Cruz	,,	,,		,, 4780	,,	,,

GEORGE PHILIP & SON LONDON & LIVERPOOL

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mouths presented to the frigid blasts of the Arctic circle, and the ice piles up along their courses preventing remunerative agriculture on their banks, the embouchure of the *great* artery of the North American continent, on the contrary, is always "open," washed by that sea wherein the Gulf stream has its birth, and converting the whole country through which it flows into smiling gardens and fruitful cornfields.

Canada has its commercial waterway in the *St. Lawrence* with its auxiliary chain of lakes and canals. This river ranks higher than any river in the world for timber-floatage, and is the second great river in N. America. As soon as the genial air melts the snow and ice, *miles* of rafts come floating down this "highway"; the river is navigable for large vessels to Montreal,—which city is situated some 575 miles above the Gulf,—but with the help of the lakes, affluents, and canals, the navigation for medium-sized steamers extends further,—many hundred miles into the interior.

The other rivers in Canada, Nova Scotia and the British possessions in North America, of commercial interest, are the Ottawa, Richelieu, St. John, Miramichi, Red River, Saskatchewan, Churchill, Hayes River, Albany, Fraser and Mackenzie.

This last river is, next to the St. Lawrence, the largest in British North America, but is only available for a very short season, having its embouchure in the Arctic Ocean at the high latitude of 70°, after a course of about 2200 miles. This river and the Churchill have their sources in the same lake.

In the *United States*, the *Mississippi* with its tributaries claims immediate attention, as it practically waters the whole continent.

The *Mississippi* has a course of 3400 miles, and is navigable for about 2200; it rises close to the Red River of the North, not far from Duluth, and the boundary between the United States and British North America, and flows past St. Paul, Davenport, St. Louis, Cairo, Memphis, Napoleon, Vicksburg and Natchez, to New Orleans. It is joined in its course by the *Missouri*,—a river running some 2500 miles before it mingles its waters with those of the Mississippi,—and is navigable from below the Rocky Mountains; this branch gives a total length of over 4000 miles.

The Missouri rises in these mountains close to Virginia City, and joins the Mississippi at St. Louis,—a great centre,—and has the important towns of Kansas City, Jefferson City, Topeka, Omaha and Yankton on its bank; Topeka is, properly speaking, on the *Kansas*, a tributary of the Missouri, seated near their confluence at Kansas City. The *Platte*, another affluent of the Missouri, rises in the Rocky Mountains and flows past Denver City joining the Missouri at Omaha. Close to the source of the Platte, near Denver City, rises the *Arkansas*, which runs southerly, with many sub-tributaries, and joins the Mississippi at Napoleon.

The only other *important* affluent of the Mississippi is the *Ohio*, which rises in the Alleghany Mountains, near Pittsburg, and flows through Cincinnati, Louisville, and Evansville, and joins the Mississippi on its eastern bank below St. Louis at Cairo.

The other affluents of the Mississippi are the *St. Peter's*, rising within two miles of the Red River of the North, (and this space is often inundated),—the *Iowa*, *Des Moines*—from Minnesota through Des Moines, the *Red River* and branches, the *St. Croix*, the *Wisconsin* and *Illinois*, all of commercial interest.

The *Ohio* becomes navigable at Pittsburg, and flows nearly 1000 miles before joining the Mississippi; it has the following tributaries, the *Wabash*,—through Indianapolis, the *Miami*, through Cincinnati, the *Scioto*, *Kentucky*, *Green River*, *Cumberland River* and *Tennessee*, this last with a course nearly as long as the Ohio itself, from beyond Knoxville joins the Cumberland River at its confluence with the Ohio near Cairo.

These rivers are subject to annual floods which much enrich the surrounding land, producing the well-known "swamps," yielding many of the vegetable products for which the United States are characterised.

Thus it may be seen that the Mississippi and its affluents water the major part of the continent,—that vast portion contained in the immense plain lying between the Alleghany or Apalachian Chain in the east and the Rocky Mountains in the west.

The other commercial rivers of the States are the *Chatanooga*, the *Alabama*, and the *Tombigby*,—all important wood rivers,—flowing into the Gulf of Florida.

The *Alatamaha* (through Atlanta), *Savannah* (through Savannah), *James* (through Richmond), *Potomac* (through Washington), *Susquehanna* (through Elmira and Harrisburg), *Delaware* (through Philadelphia), *Hudson* (through Albany and New York), and the *Connecticut* (through the State of Connecticut), all having their outlets in the Atlantic Ocean.

In the south-west is the *Rio Grande del Norte*, the boundary river between Mexico and the Union, rising close to Denver City, the source of the Arkansas, Kansas, and Platte; it flows southerly through Santa Fé, skirts Texas and the confines of Mexico, through the frontier towns of El Paso, Laredo, and Rio Grande, and flows into the Gulf of Mexico at Matamoros after a course of above 1400 miles. The navigation of this river is much impeded.

On the west coast, the rivers have short courses, owing to the proximity of the Rocky Mountains, where they rise, and the Pacific Ocean; they are the *Colombia* (through Boise City), the *Sacramento* or *Humboldt* (through Sacramento City and San Francisco), and the *Colorado*, rising near Salt Lake City with one of its branches and beyond Green River City with another, and running a course of 850 miles to the head of the Gulf of California. This river is not at present much used for commercial purposes.

Lakes and Canals.—The Lakes are among the largest in the world, they comprise—in the Chain Lakes—*L. Superior*, about 400 miles long, *L. Michigan*, about 230 miles, *L. Huron*, about 240 miles, *L. Erie*, about 240 miles, and *L. Ontario*, about 180 miles. These lakes all connect one with the other, the outflow from Lake Ontario forming the St. Lawrence R.

There are many rapids and falls during this course, and to obviate these, canals have been made, the whole waterway being designated *The St. Lawrence System*, and connecting the River St. Lawrence at Montreal with the inland country 1398 miles away, by means of the above lakes and ten intermediate canals. There is therefore uninterrupted water communication between Chicago, Duluth, and other places on the lakes, Detroit, Toledo, Buffalo, and other centres, and the open sea below Quebec.

The *fall* from Lake Superior to the tideway is 555 feet, and, with proposed improvements, the whole course will be available for steamers drawing about 14 feet of water.

The Ottawa R. and St. Lawrence join by canal *Rideau* between Ottawa and Fort Henry, having a depth of about 9 feet. Intersecting this canal at Maitlands Rapids is the *Maitland* Canal, opening up connection between Montreal and Ottawa city.

The St. Lawrence R. and New York join by the *Chambly* Canal and Richelieu R.; this canal also unites with the U.S. Erie Canal by Lake Champlain.

St. Peter's Canal, an important commercial waterway, has a depth of 18 feet, and joins the waters of the Atlantic in St. Peter's Bay with the Bras d'Or lakes of Cape Breton and St. Georges.

In the United States the *Grand* or *Erie* Canal connects Buffalo on Lake Erie with the Hudson, and thus New York, *viâ* Lyons, Rome, and Albany; this latter town is a great centre of transit activity both by rail, river, and canal. The Grand Canal has a branch between Lyons and Rome to Oswego on Lake Ontario. Thus the St. Lawrence, all the Lakes, the Hudson and New York are brought into direct water communication.

The *Ohio* Canal connects Lake Erie at Cleveland with the Ohio R. at Portsmouth,—running part of the way alongside the river Scioto,—thus completing the link between New York and all the north-east, the Mississippi, the whole country *up* the Missouri, and *down* these rivers to New Orleans.

Among minor connections are the *Cincinnati and Dayton* Canal, and the *Pittsburg and Washington* Canal—alongside the river—a great business watercourse.

Philadelphia is connected with the Susquehanna River at Harrisburg by canal, which is continued to Berwick and Athens. This waterway has a branch from Reading to Lewisport.

The Philadelphia river has a canal from Trenton running inland to Easton and there joining the New York Canal.

Newhaven and the Connecticut river are joined by a long canal entering the river near Charlestown.

In the Southern States, as an assistance in bringing down the cotton, is the *Santee* Canal joining the port of Charleston with the River Congaree.

Thus a few short *connecting links* join the basins of the several rivers, and give an unequalled inland water communication from north-east to south, and south to north-west.

SUPPLEMENT.

It is desirable to present the commerce, or total turnover, of countries, in direct ratio one to another,—for the purpose of comparison.

Hence, the commerce of each (imports and exports), together with the growth of certain *staples*, is given here in *per-centages* calculated from an assumed standard of £100,000,000; because that number is the most convenient *for comparison*, although, as is well known, it is below the turnover of the United Kingdom, the United States, and France.

For instance, assuming the total commerce of any one country to be £80,000,000, and that of another to be £105,000,000, a comparison between them is easily expressed in the statements of "ratio £80 per cent. : £105 per cent." Difference, £25 per cent.

The countries are treated alphabetically with their colonies or dependencies, if any, appended to each.

The statistics are given in *sterling* value, without reference to "market prices," that is, whether at one time a "sovereign" or pound sterling will purchase more of any given commodity than at any other time. The imports and exports to the United Kingdom, except where otherwise stated, refer to *home produce* only, not goods in "transitu," colonial produce, bullion, &c. "England" in the following paragraphs stands for the "United Kingdom."

AUSTRO-HUNGARY.—Trade *direct* with Great Britain is comparatively small, although it would doubtless show more, were it possible to collect all the merchandise which *ultimately* finds its way to England, but which is included in the export transit trade of other countries; the geographical position of Austria fully explains this. All goods sea-borne have but a small coast outlet, whereas goods carried by rail have either an outlet through Germany for the Baltic and North Sea ports, or Italy for the Mediterranean ports, or France for the mail lines.

The *staple* exports to the United Kingdom are cereals (chiefly barley) and flour, in exchange for cotton and textile manufactures, iron, coal, &c.

In—			p. c.		p. c.
1855,	the *total*	imports equalled	23.6	—exports,	23.2
1862,	,,	,,	25.00	,,	30.9
1865,	,,	,,	25.07	,,	34.06
1870,	,,	,,	42.5	,,	39.13
1876,	,,	,,	43.08	,,	42.47
1880,	,,	,,	51.12	,,	56.33
1884,	,,	,,	51.05	,,	57.62
1885,	,,	,,	46.5	,,	56.00

This statement (which does not include bullion or specie) shows that trade *gradually* increased, and with a great evenness between import and export values.

In—				p. c.		p. c.
1865,	imports from England	to Austria	equalled	.72	—exports,	.67
1870,	,,	,,	,,	1.71	,,	1.1
(A fall, after rising in the two preceding years to over 2 per cent. on imports.)						
1876,	,,	,,	,,	.78	,,	.85
1880,	,,	,,	,,	.6	,,	1.43
1885,	,,	,,	,,	.78	,,	2.16

Trade favours, first, Germany, then Turkey, Italy, Russia, England, &c.

Transactions in colonial produce and other articles of merchandise are large, and the *transit* trade from central Europe to Trieste is considerable; the value of the whole transit trade in 1884 equalled 25.91 per cent. The movements in merchandise include cereals, agricultural produce, fibres, leather, and some manufactures.

The growth of the *staple* articles with England is as follows:—cereals exported in 1873 equalled .05 per cent., and flour equalled .3 per cent., while in 1885, the former equalled .32 per cent., and the latter 1.4 per cent.

Nearly the whole area of Austro-Hungary is productive. The river Danube is an important factor in Austrian transit trade. Railways in 1875 extended 10,150, and in 1885, 14,000 miles. The total tonnage of the Austrian mercantile marine in 1875 was 330,000 tons, and in 1885, only 312,000 tons, but in comparing these it is noticeable that the sailing-vessels tonnage had declined 45,000 tons, while steam tonnage had risen 25,000 tons, but this latter with the greater rapidity of making voyages more than equalised the total net fall.

Argentine Republic.—Commerce has very largely developed with La Plata.

			p. c.		p. c.
The *total* imports in	1861,	equalled	3.75	—exports,	2.00
,, ,,	1863,	,,	5.06	,,	2.88
,, ,,	1864,	,,	4.37	and then rose suddenly.	
,, ,,	1865,	,,	5.42	—exports,	4.4
,, ,,	1866,	,,	5.75	,,	5.25

Of this trade England held about one-half.

Trade up to this point showed a *steady* increase, but in the two following decades the upward movement was very considerable, for

In—

		p. c.		p. c.
1881,	the *total* imports equalled	11.00	—exports,	11.6
1885,	,, ,,	18.4	,,	16.4

Commerce is shared, first, by Great Britain, then by France, (the imports *from England* being the largest, while the exports *to France* overbalance those to England), followed at a long distance by Belgium, &c.

Up to 1866 the *average* imports from England to the Argentine Confederation equalled about 2.4 per cent., and exports 1.5 per cent.

In—			p. c.		p. c.
1870,	the imports from England	equalled	2.34	—exports,	1.48
1874,	,,	,,	3.12	,,	1.28
1881,	,,	,,	3.34	,,	.58
1882,	,,	,,	4.16	,,	1.23
1885,	,,	,,	4.66	,,	1.88

The *staple* exports to England are animal products and grain, in exchange for textiles, coal, and machinery.

The growth of staples is as follows: *wool*, in 1865, was exported to a value equal to 2.38 and 115¾ millions pounds in weight; the value of hides, skins, and tallow exported the same year equalled 1.6 per cent. In 1873, skins, hides, and tallow rose to 1.8 per cent. *to the United Kingdom only;* in 1885, these products equalled a total of 5.00 per cent., and *wool* (total) equalled 6.5 per cent.; "whole carcasses" also now form an important item. In this year *agricultural produce* was more exported, equalling an aggregate of 2.11 per cent., comprising cereals and flax.

The *transit* trade is very large, being valued in 1885 at 2.4 per cent., of which Bolivia claimed 65 per cent.

Railway enterprise has wonderfully advanced since 1865; in this year the working mileage was only 326 miles, rising in 1873 to 664, and in 1885 to 4150; this includes a grand trunk line running from Buenos Ayres to Chili, a distance of nearly 900 miles.

BELGIUM.—Commerce has been very active in this enterprising country, and shows a large and steady increase; the *transit* trade, also, is very considerable. The chief articles of *export* are cereals, cattle, flax, dairy produce, and ironwork, with textiles from the industrial *centres;* the *imports* being colonial produce and foreign wool, largely, with English manufactures. Belgian trade is mainly with France, then England, Holland, Germany, the Baltic States, the United States, South America, &c.

In—		p. c.		p. c.
1864,	the *total* imports equalled	27.55	—exports,	23.87
1871,	,, ,,	148.65	,,	117.85

Divided into *general* imports 97.57 per cent., and *general* exports 82.31 per cent.; imports for *home consumption* 51.08 per cent., and exports of *home produce* 35.54 per cent.

In—		p. c.		p. c.
1884,	the *total* imports equalled	110.02	—exports,	106.26

Divided into *home* imports 56.57 per cent., and *home* exports 53.6 per cent.; *transit* imports 53.45 per cent., and *transit* exports, 52.66 per cent.

The *staple* articles of export to the United Kingdom are dairy produce, flax and textile manufactures, in exchange for iron, yarns, &c. Cotton manufactures now come across to England, and were valued in 1885 at .33 per cent.

In—		p. c.		p. c.
1864,	imports from England to Belgium equalled	2.3	—exports,	6.4
1866,	,, ,, ,,	2.86	,,	7.9

Colonial and foreign merchandise imported from England this year equalled 3.92 per cent.

In—				p. c.		p. c.
1870,	imports from England	to Belgium	equalled	4.48	—exports,	11.24
1871,	„	„	„	6.21	„	13.57
1874,	„	„	„	5.82	„	15.04
1881,	„	„	„	7.08	„	11.5
1885,	„	„	„	7.8	„	15.07

Foreign and colonial merchandise imported from England this year equalled 6.00 per cent., or nearly a cent. per cent. rise in the two decades.

Coal mining is a very important industry, and has largely increased.

In—			tons.
1851,	the quantity produced	was about	6,000,000
1860,	,,	,,	9,600,000
1864,	,,	,,	11,160,000
1870,	,,	,,	13,700,000
1873,	,,	,,	11,600,000
1884,	,,	,,	18,000,000

About 75 per cent. of the export of this commodity is sent to the Netherlands and France.

The movement of the *staple exports* to England is as follows:—

		equalled. p. c.		p. c.		p. c.		p. c.
Silk manufactures in	1864,	1.23	1873,	2.25	1874,	2.76	1885,	1.78
Flax „	„	.6	„	1.13	„	.97	„	.78
Butter in	„	.47	„	.44	„	.46	„	.26

Beetroot cultivation for the making of sugar is important. Ironwork and steel manufacturing, together with textile manufactures, rank among the staple national industries.

Railways have not moved much during the last ten years, the mileage in 1873, being 2100, and in 1886, 2760 miles.

The mercantile marine kept steady from 1850 until 1874, with little variation, numbering in the former year 34,900 tons, and in the latter, 31,800 tons, but in the following decade the rise was very great, the tonnage in 1885 equalling 80,600 tons.

BOLIVIA.—Trade with Bolivia is carried on chiefly through Cobija, and the Chilian and Peruvian ports on the "West Coast," and through Buenos Ayres and the Argentine Confederation on the East. The transit of goods through La Plata from Bolivia in 1885 equalled about 2 per cent.

In 1867, the trade with England was very small, the imports only equalling .004 per cent., and exports .14 per cent.

In 1870, there was practically no direct import, the imports only equalling .0005 per cent., and exports .12 per cent.

In—

		p. c.		p. c.
1874,	imports from England to Bolivia equalled	.054	—exports,	.34
1881,	” ” ”	.1	”	.33
1885,	” ” ”	.044	”	.2

The *staple* exports to the United Kingdom are copper, nitre, and silver ore, with bark, &c., in exchange for cotton goods, textiles, and iron.

		p. c.		p. c.
Total imports into Bolivia in	1873, equalled about	1.28	—exports,	1.32
” ”	1885, ”	1.2	”	1.8

showing but little life.

The movements of the *staples* with Great Britain are as follows:—

	1873, p. c.	1874, p. c.	1885,	
Silver ore in	.4	.1		the *total* export equalled about 3.00 p. c., of which England received about one-half.
Copper ” ”	.07	.1	.07 p. c.	
Nitre ” ”	.1	.11	.13 ”	

India-rubber is likely to become a staple, the supply being of the finest, and apparently inexhaustible. Coca and cinchona also form important commodities. About 50 per cent. of the trade is with Great Britain, the United States following.

Railways are projected, but not yet working. Both agricultural and mineral wealth seem unbounded.

Brazil.—The United Kingdom and United States take each about 33 per cent. of the entire trade, followed by France and Germany. The *staple* products are sugar in the north, and coffee (about 70 per cent. of the whole), in the south, then cotton, caoutchouc, &c., in exchange for manufactured textiles, iron, coal, &c., mainly from Great Britain.

The *total* imports (including bullion and specie) equalled 13.58 per cent. in 1861–62, rising in 1863–64 to 14.56 per cent., with exports 13.84 per cent.; the *average* gross turnover up to 1875 was 19.00 per cent. imports, and 22.57 per cent. exports; and from 1880–85 it averaged 18.00 per cent. imports, and 21.00 per cent. exports. In 1884 it was 21.8 and 22.75 respectively.

In—

				p. c.		p. c.
1865,	imports from England	to Brazil	equalled	5.65—	exports,	6.8
1866,	,,	,,	,,	7.22	,,	7.24
1870,	,,	,,	,,	5.36	,,	6.12
1874,	,,	,,	,,	7.67	,,	7.00
1881,	,,	,,	,,	6.65	,,	6.34
1885,	,,	,,	,,	5.35	,,	4.1

The *coffee* exports show an almost unparalleled rise; in 1822, only 150,000 bags were shipped; in 1830, the quantity had more than doubled, but was still under 400,000 bags, but in less than forty years it had risen (1867) to 2¾ *millions* of bags valued at 8.77 per cent., thus,—in 1845, 1¼ millions; in 1850, 1½ millions, and in 1855, over 2 millions —while in 1885 the value had risen to about 14.00 per cent. This staple, as far as *English* trade is concerned, has fallen a little, being valued in 1883 at a sum equal to 1.1 per cent., and in 1885 at .47 per cent.

Sugar.—The total export in 1840 was about 1,900,000 cwts.; in 1845, 2,000,000 cwts.; in 1850, 2,800,000 cwts.; in 1855, 2,100,000; in 1861, 3,000,000 cwts.; in 1866, 2,500,000 cwts. Sugar to the United Kingdom equalled in 1864, 1.46 per cent.; in 1870, 1.46 per cent.; in 1873, 2.01 per cent.; in 1874, 1.74 per cent.; in 1880, 1.51 per cent.; and in 1885, .8 per cent.

Caoutchouc to the United Kingdom equalled in 1880, 1.3 per cent.; and in 1885, 1.25 per cent.

Cotton shows a large export to England, equalling in 1864, 4.38 per cent.; in 1868, 4.48 per cent.; in 1870, 2.8 per cent.; in 1872, 4.73; in 1873, 2.85; in 1875, 2.34 per cent.; but this value has declined until in 1885 it was barely 1.00 per cent.

The other exports include diamonds, tobacco, rum, molasses, tapioca, and all West Indian fruits and other produce.

Railway progress has been rapid of late years, for whereas in 1873 there were only 400 miles open, and in 1875 only 800, in the following decade (1886) there were 4400 miles.

BULGARIA.—The principal exports consist of cereals (averaging one and a half million tons annually), wool, tallow, dairy produce, and other "Black Sea" goods, in exchange for textiles, coal, and iron. The trade is chiefly down the Danube, and from Varna.

The total imports in 1884 equalled about 1.85 per cent., and exports 1.95 per cent.

There is a good field yet both in undeveloped mineral resources, and in the produce of the agricultural districts. The *direct* trade with the United Kingdom is very small, only reaching in imports from England .07 per cent. in 1885 and exports .3 per cent.

Railways extended 140 miles in 1886. There are a few steamers and steam barges for the Danube work.

Central America.—The *staple* exports of the States comprised under the name of "Central America" are coffee, cochineal, indigo, fruits, hides, &c., in exchange mainly for textiles.

The staple of Costa Rica is coffee: trade is carried on chiefly with England (about one-half of the whole), followed by the United States, &c.

In—				p. c.		p. c.
1870,	imports,	England to Central	America equalled	.36	—exports,	1.05
1874,	„	„	„	.15	„	1.12
1881,	„	„	„	.91	„	1.19
1884,	„	„	„	.9	„	1.3
1885,	„	„	„	.67	„	1.06

The *total* imports in 1884 equalled 2.8 per cent. and exports 4.00 per cent.

Chili.—Commerce has increased largely since the middle of the present century.

In 1848 the *aggregate* imports and exports only equalled 3.4 per cent.; while

In—		p. c.		p. c.		p. c.
1866,	the *total* imports equalled	4.17	—exports,	5.8 ;	a total of,	9.25
1873,	„ „	7.58	„	7.76	„	15.34
1885,	„ „	8	„	10.3	„	18.3

Bullion shipments increased this last amount 3.4 per cent.

Trade is carried on mainly with Great Britain, followed by Germany, France, the "States," &c.

In—				p. c.		p. c.
1867,	the imports	from England	to Chili equalled	2.52	—exports,	4.41
1870,	„	„	„	2.67	„	3.82
1874,	„	„	„	2.75	„	4.7
1881,	„	„	„	2.52	„	2.73
1885,	„	„	„	1.4	„	2.5

The *staple* exports to England are copper ore, regulus, nitrate, sugar, wheat, wool, &c., in exchange for textiles, iron, &c.

The movement of these staples is as follows:

In—	p. c.		p. c.
1873, exports, *copper ore* and *regulus* to U. K. equalled	2.84	1885,	1.23
,, ,, *wheat* ,, ,,	1.00	,,	.67
,, ,, *wool* ,, ,,	.12	,,	.05

	p. c.		p. c.
The *total* exports of nitre in 1884, equalled	4.55	1885,	3.85
,, ,, copper ,, ,,	2.1	,,	1.7

Railway mileage, open in 1873, was 620, and in 1885 1420 miles.

The mercantile marine in 1872 numbered 58,000 tons, but in 1875, this had declined to 27,000, and in 1885 had risen again to 72,620 tons.

The coasting and transit trade is very large, especially in cereals and food stuffs.

China.—Commerce is mainly with Great Britain and the British colony of Hong Kong through the "treaty ports," followed by India, the "States," &c.

In—	p. c.		p. c.
1865, the imports from England to China equalled	3.6	—exports,	10.67
1870, ,, ,, ,,	6.14	,,	9.48
1874, ,, ,, ,,	4.75	,,	11.15
1881, ,, ,, ,,	5.96	,,	10.7
1884, ,, ,, ,,	4.15	,,	10.14
1885, ,, ,, ,,	5.18	,,	8.6

The *staple* export to England is tea (about 70 per cent. of the whole export), followed by silk, cotton, &c., in exchange for textiles. A large trade is done in English commodities with the British Colony of Hong Kong, which is *geographically* a part of China, although the *Trade* is not included in the above. (See Hong Kong, English Colonies, page 444.)

The growth of the *staple*, *tea*, is as follows :—

In—

					p. c.
1864,	exports from China to England,	112¼	million lbs.,	valued at	8.38
,,	The *total* export equalled,	170	,,		
1866,	exports from China to England,	127½	,,	,,	10.18
1870,	,, ,,	123	,,	,,	8.5
1874,	,, ,,	127¼	,,	,,	8.7
1881,	,, ,,	151¾	,,	,,	7.5
1885,	,, ,,	131¼	,,	,,	6.00

Exports of *silk* to England show a marvellous rise in certain years, being in—

1867,	valued at	.05	per cent. ;	1868,	valued at	.08	per cent.
1869,	,,	·3	,,	1870,	,,	.65	,,
1871,	,,	1.7	,,	1872,	,,	2.00	,,
1873,	,,	3.00	,,				

falling away in 1874 to 2.00 per cent., and continuing without much fluctuation up to 1881, when they stood at 1.78 per cent ; in 1884 rising to 2.6 per cent. ; and in 1885 dropping to just under 1 per cent.

From all accounts, China is abundantly rich in every mineral, and possesses immense coal-fields, besides being capable of yielding large amounts of all agricultural produce. Railways are only just being begun, a concession having been granted early in 1887.

The *total* turnover of Chinese Trade does not show much variation in the twenty years, being valued in 1864 at 64 per cent., and in 1885 at 55 per cent., fluctuating between these two points in the interim.

Corea.—The total trade in this country in 1884 equalled only about .3 per cent., in the following year this rose to .4 per cent. ; the exports are chiefly rice, copper and metals, &c., in exchange for textiles. Commerce is mainly with the neighbouring Japanese Islands. White cowhides may be considered a staple export.

Colombia.—Commerce with the United Kingdom is small, even with such natural resources as obtain to this country.

In—

	p. c.		p. c.
1870, imports from England to Colombia equalled	2.13	—exports,	.9
1873, (the best year) ,, ,, ,,	3.00	,,	1.08
1881, imports from ,, ,, ,,	1.18	,,	1.37
1885, ,, ,, ,, ,,	.66	,,	.23

The *transit* trade across the Isthmus of Panama is the chief trade of the country, being valued at an annual average of 16 per cent.

	p. c.		p. c.
The *total* imports in 1880, equalled	2.08	—exports,	2.8
,, ,, 1884, ,,	1.9	,,	2.7

The *staple* exports to Great Britain are coffee, cotton, cinchona, dye stuffs, &c., in exchange for coal, iron, and textiles.

Railway mileage is small, being under a total of 140 miles.

The natural facilities for all W. I. agricultural produce seem boundless.

The movements of the *staples* are as follows :—

		p. c.		p. c.		p. c.
Cotton equalled in	1873,	.13	1874,	.22	1885, it had fallen to	.03
Cinchona ,,	,,	.23	,,	.25	,, ,, ,,	.02

Denmark.—Trade is carried on mainly with Germany, Great Britain, Scandinavian States, &c.

The *staple* exports to Great Britain are agricultural and dairy produce, cattle, &c., in exchange for textiles, coal, and iron.

The *total* imports in 1872 equalled 6.4 per cent., and exports 4.75 per cent., suddenly rising until—

In—

1880, imports equalled	12.6 p. c.	—exports,	10.9 p. c.
1885, ,,	15.23 p. c.	,,	10.00 p. c.

In unison with this *general* increase of trade, commerce with the United Kingdom rose—

In—					p. c.		p. c.
1865,	imports from	England	to Denmark	equalled	1.26—	exports,	2.28
1870,	,,	,,	,,	,,	2.00	,,	3.05
1874,	,,	,,	,,	,,	2.5	,,	3.9
1881,	,,	,,	,,	,,	2.01	,,	4.6
1884,	,,	,,	,,	,,	2.2	,,	5.25
1885,	,,	,,	,,	,,	1.9	,,	4.82

The movements of the *staple* exports to England are as follows:—

			p. c.		p. c.		p. c.
Butter and butterine	equalled in	1870,	.77	1883,	2.15	1885,	2.12
Agricultural produce	,,	1874,	1.23	,,	.76	,,	.36
Cattle, sheep, &c.,	,,	,,	.57	rose in		,, to	1.37

Cattle-rearing must now be styled the *staple* industry of Denmark. About 20 per cent. of the whole area of this country is unavailable for agricultural pursuits.

In 1876 the railway mileage was 120, rising to 1220 miles in 1886.

The mercantile marine in 1875 equalled 212,000 tons, rising in 1885 to 270,000 tons.

Colonies.—Denmark possesses Iceland, Greenland, and three islands in the West Indies—these last being the most valuable, exporting many millions of pounds of sugar, with the accompanying commodities of rum and molasses, besides coffee and other produce.

In—			p. c.		p. c.
1874,	the imports from	England equalled	.46—	exports,	.4
1882,	,,	,,	.2	,,	.1
1884,	,,	,,	.15	,,	.04
1885,	,,	,,	.11	,,	.02

ECUADOR.—Trade is largely with the United Kingdom;

the *staple* exports being cinchona, cocoa, &c., in exchange for textiles.

In—

	p. c.		p. c.
1870, imports from England to Ecuador equalled	.06	—exports,	.14
1874, ,, ,, ,,	.06	,,	.29
1881, ,, ,, ,,	.25	,,	.29
1885, ,, ,, ,,	.13	,,	.15

The movements of the staples with England are as follows:—

In—

	p c.		p. c.		p. c.
1874, Cinchona exports equalled	.05 ;	1884,	.12 ;	1885,	.03
„ Cocoa ,,	.17 ;	„	.12 ;	„	.09

out of a *total* export of .75

The country is prolific in all agricultural produce.

	p. c.		p. c.
The *total* imports in 1873 equalled	.2	—exports,	.4
,, ,, 1885 „	1.12	„	.99

Besides the staples named, caoutchouc, hides, corozo nuts, coffee, &c., are exported, and the trade might be largely increased. The Galapagos Islands belong to Ecuador (see *Island Trade*).

The total railway mileage is under a hundred miles.

EGYPT.—Trade is very extensive, and is principally with the United Kingdom, followed by Turkey, France, &c.

The *total* commerce between 1865–75 averaged from 25 to 30 per cent., and from 1875–85 about 20.5 per cent.

In—

	p. c.		p. c.
1861, imports from England to Egypt equalled	2.27	—exports,	8.4
1863, ,, ,, ,,	4.4	,,	16.5
1865, ,, ,, ,,	6.00	,,	21.77
1870, ,, ,, ,,	8.72	,,	14.11
1874, ,, ,, ,,	3.6	,,	10.5
1881, ,, ,, ,,	3.16	,,	9.3
1885, ,, ,, ,,	3.5	,,	8.8

The *staple* exports to England are cotton and cotton seed, cereals, gum, &c., in exchange for textile manufactures, coal, and machinery.

The movement of the staple is as follows :—

Cotton.—

						p. c.
Exports in	1861	equalled	141	million lbs.	at a value equal to	1.6
,,	1865	,,	177	,,	,,	14.0
,,	1870	,,	143¾	,,	,,	6.5
,,	1874	,,	172¼	,,	,,	7.27
,,	1884	,,	180	,,	,,	6.24
,,	1885	,,	177½	,,	,,	5.7
					out of a total export of	7.7

The opening of the Suez Canal very much affected the cotton trade. Silk was formerly a staple export, but has almost disappeared. This trade was chiefly in transit from India, China and Japan, but appeared in the Egyptian Trade Returns.

The present *transit* trade of Egypt is enormous.

The railway mileage in 1874 was 1000, increased to 1300 miles by 1885.

France.—Trade is carried on first with Great Britain, followed a long way in the rear by Belgium, Germany, Spain, &c.

Commerce is divided into "*home* imports and exports," and "*general* imports and exports," or transit.

In—

				p. c.			p. c.
1860,	gross *general*	commerce	equalled about	200	—*Home*	commerce,	166
1863,	,,	,,	rose to .	240	,,	,,	212
1870,	,,	,,	,, .	320	,,	,,	225
1873,	,,	,,	,, .	330	,,	,,	293
1881,	,,	,,	had risen to	427.5	,,	,,	338
1884,	,,	,,	fluctuating but little, fell to	378.3	,,	,,	303
1885,	,,	,,	dropped to	355.00	,,	,,	287
					but rose in 1886 to		301.40

These figures represent a remarkable "turnover," and, on the average, a steady increase of trade; the aggregate commerce may be summarised thus:—

In—

				p. c.
1860	total	imports and	exports equalled	366
1863	”	”	”	452
1870	”	”	”	545
1873	”	”	”	623
1880	”	”	”	765
1884	”	”	”	681
1885	”	”	”	642

The disparity between imports and exports can be judged by the following:—

In 1881, imports equalled 433 per cent., and exports 332 per cent.; and in 1885, imports equalled 361 per cent., and exports 281 per cent.;—about the same ratio between the two has been maintained throughout.

Not included in the above "commerce" are the movements of bullion, which were necessarily considerable, equalling in 1885, 9.15 per cent. imports and 5.13 per cent. exports.

In—

				p. c.		p. c.
1860,	imports from	England to	France equalled	5.25	—exports,	17.77
1863,	”	”	”	8.67	”	24.00
1865,	”	”	”	9.06	”	31.62
1870,	”	”	”	11.64	”	37.6
1873,	”	”	”	17.3	”	43.34
1880,	”	”	”	15.6	”	41.97
1884,	”	”	”	16.75	”	37.43
1885,	”	”	”	14.98	”	35.7

The movements between Great Britain and France, *besides* the *home* import and export, as above, include considerable imports of colonial and foreign produce and goods in transit. In 1884, England sent over besides the 16.75 per cent. as above, 9.6 per cent. of *foreign and colonial* goods, and 8 per cent. in 1885.

The *staple* exports to the United Kingdom include dairy produce, wine, brandy, silk and other manufactures in exchange for coal, fuel, iron, machinery, woollen and other textiles.

The movements of the staples are as follows :—

		Equalled. p. c.		p. c.		p. c.		p. c.
Silk of all sorts exported to Great Britain in	1872,	9.15	1874,	11.14	1883,	6.66,	1885,	5.97
Woollen manufactures .	,,	2.8	,,	2.87	,,	3.96	,,	5.23
Dairy produce . .	,,	3.31	,,	5.95	,,	4.07	,,	3.92
Sugar of all kinds . .	,,	3.5	,,	4.10	,,	*refined* 1.99	,,	*refined* .47
Leather	,,	1.08	,,	1.25	,,	1.65	,,	1.09
Wine	,,	2.72	,,	2.61	,,	2.7	,,	2.64
Brandy	,,	1.3	,,	1.41	,,	.98	,,	1.22

Among cereals, *wheat* is the leading crop, *but not grown* sufficiently *to export*—the imports considerably exceed the exports, although the yearly yield averages six millions of tons weight; rye and buckwheat form the bulk of cereal export.

In 1872 France *imported* from England .23 per cent., and exported 5.65 per cent.; in 1874, imported .17 per cent.—out of a *total* cereal import of 11.5 per cent.—and exported 1.7 per cent.; in 1881, the *total imports* equalled 20.79 per cent., and exports 3.7 per cent.; and in 1885, imports 9.3 per cent., and exports 1.38 per cent.

The total silk (manufactured) export was in—

1866,	1873,	1874,	1878,	1884,	1885,
p. c. 19.6;	p. c. 12;	p. c. 19;	p. c. 9.1;	p. c. 9.5;	p. c. 8.9.

The total woollen (manufactured) export was in—

1865,	1874,	1878,	1884,	1885,
p. c. 15.85;	p. c. 14.00;	p. c. 12.4;	p. c. 13.4;	p. c. 13.3.

The total wine export was in—

1874, 9.5 p. c.; 1884, 9.5 p. c.; 1886, 10.2 p. c.

Cane sugar was imported in 1883 to the extent of 108½ million kilos.; and in 1885 to 210¾ million kilos.

Home beet sugar manufactured in 1884 equalled 322½ million kilos.; and in 1885, 225¼ million kilos.

The *wine* yield in a fairly good year averages 700 million of gallons.

The weight of *silk cocoons* yielded in France in 1881, was 9¼ million kilos.; in 1883, 7½ million kilos.; and in 1886, 8¼ million kilos.

The annual output of French coal is about 20,000,000 tons, and that of iron, about 4,000,000 tons, both of which might be largely increased.

The French Mercantile Marine in 1867 equalled just over 1,000,000 tons; by 1873, the increase was only 20,000 tons; and in 1885, the tonnage had dwindled again to 1,000,200 tons.

Railway growth has been rapid. In 1850 the mileage was only 1875 miles; increasing by 1855 to 3450, in 1860 to 5900, in 1865 to 8500, in 1870 to 11,100, in 1874 to 12,820, and in 1886 to 19,950 miles.

FRENCH COLONIES AND PROTECTED COUNTRIES.—*Algeria.*—Trade is mainly with France—about 65 per cent. of the whole,—followed by Spain, Italy, England, &c.

The principal yield is agricultural produce,—cereals, vine and its products, olives, tobacco, &c.;—with some iron and other ores.

In—

			p. c.		p. c.
1867,	the *total* imports	equalled	7.5	and exports,	3.88
1870,	„	„	6.9	„	4.97
1873,	„	„	8.27	„	6.1
1881,	„	„	11.98	„	6.00
1885,	„	„	8.8	„	7.9

The trade with the United Kingdom was as follows:—

In—

		p. c.		p. c.
1861,	the imports from England to Algeria equalled	.03,	exports,	.02
1865,	,, ,,	.09,	,,	.12
1870,	,, ,,	.12,	,,	.23
1874,	,, ,,	.05,	,,	.5
1881,	,, ,,	.3,	,,	.75
1886,	,, ,,	.35,	,,	.88

The *staple* exports to England are fibres, minerals, ores, and cereals (chiefly barley) in exchange for coals and textiles.

		p. c.		p. c.
Esparto	and fibre exports in 1874 equalled	.28 ;	in 1885 equalled	.42
Cereals	,, ,,	.12 ;	,, ,,	.21
Mineral ores	,, ,,	.08 ;	,, ,,	.18

There is also an extensive coasting trade. Railway mileage in 1874 equalled 340, and in 1885 1300 miles.

Tunis.—The principal exports are to Italy, France, and Great Britain, and consist of olive oil, cereals, sponges, and esparto.

The *total* turnover (1874–1884) averaged 2.4 per cent. per annum. The imports in 1885 equalled 1.1 per cent., and exports .88 per cent.

In—

		p. c.		p. c.
1881,	imports from England to Tunis equalled	.07	and exports	.2
1885,	,, ,, ,,	.08	,,	.15

The *staple* export to England is esparto. Railway mileage is under 300 miles.

Other French colonies and dependencies are some few places in India, Cochin China, Tonquin, French Guiana and three West India Islands, some islands in Oceania, Réunion, Nossi-bé, Senegambia, Gaboon, &c.

The *total* imports from England to French colonies equalled in 1885 .57 per cent., and exports .03 per cent.

GERMANY.—The *total* turnover of German commerce in 1882 equalled 320.4 per cent., and in 1885, 295.95 per cent.

The *transit* trade is very considerable, amounting to an annual value of about 628.5 per cent.

Trade is mainly with the United Kingdom, Austria, Belgium, Russia, &c.

In—				p. c.		p. c.
1865,	*direct* imports,	England to	Germany equalled	15.66—	exports,	16.22
1870,	"	"	"	27.44	"	15.4
1874,	"	"	"	24.8	"	19.95
1881,	"	"	"	17.43	"	23.65
1885,	"	"	"	16.4	"	23.07

The imports from England of colonial and foreign produce, not included above, are also very considerable, equalling 10.6 per cent. in 1885.

The *staple* exports to England are cereals, sugar, animal products, &c., in exchange for coal, iron, machinery, textiles, &c.

Cereals and bread stuffs.

In 1872 equalled 4.76 p.c.; 1874, 3.34 p.c.; 1883, 4.2 p.c.; 1885, 2.06 p.c.

Sugar.

In 1872 equalled .45 p.c.; 1874, .7 p.c.; 1883, 6.3 p.c.; 1885, 4.71 p.c.

Animals and animal products.

In 1872 equalled 2.53 p.c.; 1874, 2.9 p.c.; 1883, 1.43 p.c.; 1885, 1.35 p.c.

Agriculture, cattle-rearing, mining and manufactures are staple German industries.

The total output of coal in 1885 equalled 58¼ million tons, and of iron nine million tons.

The German mercantile marine, in 1875, equalled 1,100,000, and in 1885, 1,300,000 tons.

Railway mileage in 1875 equalled 15,400, and in 1886, 23,535 miles.

German Free Towns.—The returns are included in the above, but for comparison we give—

			p. c.		p. c.
Hamburg,	total imports in 1885	equalled	107	—exports,	91.00
Lubeck,	,,	,,	9.5	,,	8.35
Bremen,	,,	,,	24.75	,,	24.00

German Dependencies consist of portions of the African Continent, part of Papua, and other islands in the Pacific.

GREECE.—Trade with Greece in the total has fluctuated but little during the last twenty years, the gross turnover from 1865 to 1880 averaging from 6 to 6.5 per cent.; in 1882 it rose to 9.75 per cent., but has declined a little since.

About 65 per cent. of the total commerce is with Great Britain, followed by Austria, Turkey, France, &c.

In—

				p. c.		p. c.
1865,	the imports from England	to Greece	equalled	.58	—exports,	.8
1870,	,,	,,	,,	.94	,,	1.28
1874,	,,	,,	,,	1.00	,,	1.54
1881,	,,	,,	,,	1.14	,,	2.16
1885,	,,	,,	,,	.88	,,	2.00

The *staple* exports are currants, valonia, olive oil, and ores, in exchange for textiles, some iron and coal.

In—

				p. c.		p. c.		p. c.
1867,	*currant*	export	equalled,	.75 ;	1874,	1.28 ;	1885,	1.45.
,,	*valonia*	,,	,,	.05 ;	,,	.05 ;	,,	.06
,,	*olive oil*	,,	,,	,,	,,	.02 ;	,,	.008

The Greek Mercantile Marine in 1874 equalled about 400,000 tons, falling in 1885 to 260,000 tons.

Railway mileage is small, being under 400 miles.

HAWAIIAN ISLANDS.—Trade is chiefly with the United States (over 90 per cent. of the whole).

The *total* imports equalled in 1885 .77 per cent. and exports 1.8 per cent.

The *staple* exports are sugar and rice, followed by coffee, &c.; and imports, textiles, &c.

Sugar export in 1885 equalled 1.67 per cent.

Agriculture is the staple industry. Railway mileage equals thirty miles.

HAYTI AND SAN DOMINGO.—Commercial intercourse is chiefly with the United Kingdom and United States.

				p. c.		p. c.
From 1865–1870, the *total* imports averaged				1.25	—and exports,	1.8
While in 1885–1886,	,,	,,	,,	1.2	,,	1.6

showing but little change.

The principal exports are coffee, mahogany and other woods, cotton, &c.

In—

				p. c.		p. c.
1870, imports from England equalled				.4	—exports,	.23
1874,	,,	,,	,,	.44	,,	.34
1881,	,,	,,	,,	.38	,,	.11
1885,	,,	,,	,,	.36	,,	.11

The *staple* exports are logwood, mahogany, and coffee, in exchange for textiles.

			p. c.		p. c.		p. c.
Coffee exports in 1874, equalled			.23;	1880,	.03;	1885,	.006
Mahogany	,,	,,	.04;			and in 1885,	.097

Agriculture is the staple industry. The agricultural and mineral resources of the Republic are very considerable.

ITALY.—Trade shows a steady increase, and is carried on chiefly with France and Algiers, then the United Kingdom, Austria, Germany, &c.

In—

			p. c.		p. c.
1867, total imports equalled			33.23	—exports,	20.82
1870,	,,	,,	33.71	,,	22.91
1874,	,,	,,	52.2	,,	39.42
1881,	,,	,,	49.55	,,	46.57
1884,	,,	,,	52.7	,,	42.61
1885,	,,	,,	58.31	,,	37.83

The principal exports are the *staples* of olives and olive oil, with silks both raw and manufactured.

	p. c.		p. c.
Silks of all kinds averaged, in 1875, about	7,	rising by 1885 to	10.76
Oils, fruits, wine ,, ,, ,,	4,	,, ,,	5.85

The production of raw silk from 1880–85 equalled 85,000,000 lbs. weight.

In—	p. c.		p. c.
1865, imports from England to Italy equalled	5.46	—exports,	3.00
1870, ,, ,, ,,	5.27	,,	3.84
1874, ,, ,, ,,	6.36	,,	3.63
1881, ,, ,, ,,	6.43	,,	3.27
1884, ,, ,, ,,	6.99	,,	3.16
1885, ,, ,, ,,	6.62	,,	3.00

The *staple* exports to England are olive oil, chemicals, dairy produce, fibres, fruits, sulphur, shumach, wines, &c., in exchange for coal, fuel, iron, machinery, and textiles.

Movement of staples with England :—

	p. c.		p. c.		p. c.
Hemp exports in 1873 equalled	.5 ;	1874,	.47 ;	1885,	.39
Olive oil ,, ,, ,,	.46 ;	,,	.46 ;	,,	.31
Chemicals ,, ,, ,,	.32 ;	,,	.3 ;	,,	.15
Sulphur ,, ,, ,,	.3 ;	,,	.34 ;	,,	.17
Fruits and shumach ,,	.22 ;	,,	.22 ;	,,	.65

Agriculture is the staple industry, but is conducted in a very primitive manner; about half of the entire crop of cereals is composed of wheat; this does not suffice for home consumption, and a considerable quantity is imported.

The average yield of wine in moderate years is 6/650 million gallons; of olives, about 10 million bushels, and of olive oil, about 3 to 3½ million hundredweights.

Iron was mined to the extent, in 1884, of 225,000 tons, at a value of .1 per cent.; the average yearly value of iron and steel equals .85 per cent. Sulphur mining produced in 1884 just over 410,000 tons, at a value of 1.46 per cent.; and marble was valued at 1.00 per cent.

The Italian Mercantile Marine in 1870 equalled 950,000 tons, rising by 1885 to 971,000 tons.

Railway mileage in 1873 was 4240; in 1874, 4600; and in 1885, 6600 miles.

Italian colonies consist of only a few stations on the Red Sea.

JAPAN.—Since the opening of the ports to international trade, commerce has wonderfully developed; trade is carried on in about equal amounts with the United Kingdom and the United States, followed by China and France, &c.

In 1872 the total "turnover" was about 10.1 per cent.; in 1874, 8.8 per cent.; and in 1885, 12.88 per cent.; the *imports* from 1872–1878 exceeding the exports by about 2 per cent., from this time gradually assimilating until in 1885 the reverse was the case, and the exports exceeded the imports by 2 per cent.

The exports consist of silk, tea, copper, cuttle-fish, rice, coal, &c., and the imports, textiles (about 50 per cent.), sugar, minerals, and mineral oils, &c.

In—		p. c.		p. c.
1870,	the imports from England to Japan equalled	1.6	—exports,	.09
1874,	,, ,, ,,	1.28	,,	.54
1881,	,, ,, ,,	2.82	,,	.67
1885,	,, ,, ,,	2.00	,,	.5

The *staple* exports to England are silk, tobacco, copper, earthenware, &c., in exchange for iron and textiles.

	p. c.		p. c.
The *total silk* export in 1874 equalled	1.43	—1885,	2.89
,, *tea* ,, ,,	.88	,,	1.4

The export of—

Tobacco to England in 1874 equalled .08 p.c.; 1884, .05 p.c.; 1885, .13 p.c.

Agricultural pursuits form the staple industry.

The railway mileage in 1885 was under 260 miles.

LIBERIA.—Trade returns under this head include the whole of the "West Coast of Africa,"—except British possessions,—with its exports of palm oil, nuts and kernels, ivory and india-rubber.

The imports from—

			p. c.		p. c.
England to Africa (W. C.),	1870,	equalled	.8	—exports,	1.5
,, ,, ,,	1874,	,,	.76	,,	1.82
,, ,, ,,	1881,	,,	.82	,,	1.5
,, ,, ,,	1884,	,,	1.11	,,	1.4
,, ,, ,,	1885,	,,	.78	,,	1.13

The *staple* export is palm oil, in exchange for textiles.

In 1874, the export of this staple to England equalled 1.48 per cent., and in 1885 .65 per cent.

Agriculture is the staple industry.

MADAGASCAR.—Trade is chiefly with Mauritius, and Réunion, followed by France, the United Kingdom, and United States. The total "turnover" averages under 1 per cent.

In—

		p. c.		p. c.
1878,	the imports from England equalled	.02	—exports,	.004
1880,	,, ,, ,,	.05	(1883)	.09
1885,	,, ,, ,,	.007	,,	.01

The exports to England consist mainly of fibres and caoutchouc, in exchange for textiles.

MEXICO.—The *staple* exports to the United Kingdom are silver and other minerals, with mahogany and other woods, hemp and fibres, sugar, coffee, &c., in exchange for textiles, iron, and machinery.

Commerce is mainly with the United States, followed by

England and France: the exports *to England* being the largest, and the imports *from France* nearly equalling the imports from the United Kingdom and United States together.

The *total* imports in—

		p. c.		p. c.
1874,	equalled	5.7	—exports,	5.09
1881,	,,	5.8	,,	7.8
1885,	,,	9.3	,,	7.16

Direct trade with the United Kingdom is small.

The import—

				p. c.		p. c.
In 1865,	from U. Kingdom	to Mexico	equalled	1.9	—exports,	.32
1867,	,,	,,	,,	.81	,,	.31
1870,	,,	,,	,,	.91	,,	.3
1874,	,,	,,	,,	1.12	,,	.54
1881,	,,	,,	,,	1.6	,,	.59
1884,	,,	,,	,,	1.01	,,	.7
1885,	,,	,,	,,	.8	,,	.72

Mining and agriculture are the staple industries.

The export of the staple—

				p. c.		p. c.		p. c.
Mahogany	to England	in 1873,	equalled	.3 ;	1874,	.34 ;	1885,	.3
Fibres	,,	,,	,,	.03 ;	,,	.04 ;	,,	.04
Dye-woods	,,	,,	,,	.02 ;	,,	.03 ;	,,	.1

Railway mileage in 1874 equalled 330, in 1879 370, in 1885 3670 miles.

MOROCCO.—Trade with Morocco is first with England (about 50 per cent.), followed by France and Algeria, Spain, &c.

				p. c.		p. c.
The *total* imports	in	1850,	only averaged	.31	—exports,	.4
,,	,,	1860,	increased to about	.8	,,	.76
,,	,,	1865,	equalled	1.00	,,	1.01
,,	,,	1870,	,,	.9	,,	.8
,,	,,	1873,	,,	.82	,,	1.5
,,	,,	1885,	,,	1.2	,,	1.1

The principal exports are, almonds and fruits, cereals, gums, olive oil, cattle, beans, wax, &c., in exchange for textiles, sugar, silk, &c.

In—

			p. c.		p. c.
1865,	imports from England	equalled	.88	—exports,	.7
1870,	,,	,,	.23	,,	.24
1874,	,,	,,	.44	,,	.7
1881,	,,	,,	.27	,,	.25
1885,	,,	,,	.43	,,	.48

The *staple* exports to England are maize, beans, and gum, with oil and almonds in exchange for textiles.

			p. c.		p. c.
Maize and beans	exported in 1874,	equalled	.36;	1885,	.24
Olive oil	,,	,,	.07;	,,	.07

Agriculture is the staple industry. There are no railways.

MOZAMBIQUE, *see* Portuguese Colonies, page 417.

NETHERLANDS.—HOLLAND.—Trade is carried on mainly with Great Britain and Germany, after the Dutch Colonies. With England commerce has gradually increased for the last quarter of a century.

In—

			p. c.		p. c.
1861,	imports from England	equalled	6.43	—exports,	7.7
1865,	,,	,,	8.11	,,	12.45
1870,	,,	,,	11.22	,,	14.31
1874,	,,	,,	14.42	,,	14.46
1880,	,,	,,	9.24	,,	25.9
1884,	,,	,,	10.24	,,	25.87
1885,	,,	,,	8.88	,,	25.00

The *staple* exports to England are, dairy produce, cattle, gin, manufactures, &c., in exchange for textiles, yarn, &c.

Dairy produce exports in 1874, equalled 3 per cent. (1.9 per cent. butter, &c., and 1.1 per cent. cheese); 1885, 5.29 per cent. (butter, &c., 4.46 per cent., cheese, .83 per cent.)

Cattle exports in 1874, equalled 1.7 per cent.; in 1885, .99 per cent.

A great deal of the *active* trade is transit, for the *colonial* movements between the two countries are very considerable.

The *total* imports in 1872, equalled 105.46 per cent., and exports 103.76, composed of—

General imports, 65.38 p. c.; *general* exports, 54.98 p. c.
Home consumption imports, 40.08 p. c.; *home produce*, 48.78 p. c.

In—

	p. c.		p. c.
1880, the total *home* imports equalled	70	—exports,	52.5
1885 „ „ „	94	„	70.08

Agricultural pursuits are staple industries.

In 1860, the Mercantile Marine equalled about 526,000 tons; falling in 1865, to 460,000 tons; in 1870, to 450,000 tons; and in 1885, to 300,000 tons.

Railway mileage in 1873 was 1040, and in 1885, 1550 miles.

Dutch Colonies.—These consist of the "Dutch East Indies"—Java, Sumatra, &c., "Six West India Islands," and "Surinam."

Dutch East Indies.—Trade centres in Java, and is nearly entirely with the mother country, equal to about 70 per cent., the rest of the commerce being divided between England, France, the "States," and Germany. Trade is also carried on with China.

In—

	p. c.		p. c.
1870, the *total* imports equalled	3.9	—exports,	5.46
1873, „ „ „	6.72	„	9.07

From this date to 1885 trade gradually increased, and in that year the average imports equalled about 15 per cent., and exports 19 per cent.

The principal exports are rice, sugar, coffee, indigo, spices, and all East India goods.

The *staple* export to England is sugar, in exchange for textiles and yarn.

In—				p. c.		p. c.
1866,	imports from	England to Java	equalled	1.73	—exports,	.01
1870,	,,	,,	,,	.9	,,	.26
1874,	,,	,,	,,	1.2	,,	1.3
1881,	,,	,,	,,	1.57	,,	2.66
1885,	,,	,,	,,	1.57	,,	3.00

In 1862 the export of *sugar* to England equalled .09 per cent.; in 1864, .016 per cent.; in 1865, practically nil, being only .0002 per cent.; in 1866, .008 per cent.; in 1873, .42 per cent.; by 1883 it had risen to 3.88 per cent., falling in 1885 to 2.86 per cent.

There is a considerable coasting trade. Railway mileage in 1874 equalled 160 and in 1885, 590 miles.

The exports from the Colonies amounted in 1883 to a total value equalling 17.43 per cent.

OMAN.—The south-east corner of Arabia does a fair trade with surrounding countries, India, Persia, Zanzibar, &c., but has little direct intercourse with Europe.

The *total* imports average about .35 per cent., and exports .3 per cent.

The imports from England are very small, only averaging .001 per cent., and exports, .001 per cent.

The principal exports are dates, pearls, cloth, &c.

PARAGUAY.—There is no *direct* intercourse with the United Kingdom, notwithstanding that England supplies Paraguay with about one-half of the total imports, *but entirely through other countries.*

				p. c.		p. c.
The *total* imports	in	1873	equalled	.22	—exports,	.22
,,	,,	1883	,,	.19	,,	.35
,,	,,	1884	,,	.29	,,	.31

The *staple* exports are Yerba maté or Paraguay tea, tobacco and animal products; and the imports, textiles and alimentary goods.

Agriculture is the staple industry. Railway mileage is under 50 miles.

Persia.—Direct trade with Persia is very small, averaging for many years under .4 per cent., and this made up largely by the value of the opium export.

The total trade of Persia must be large and capable of great extension; it has been roughly estimated that the total turnover averages 4.6 per cent. annually.

English goods find their way into Persia through other countries, India, the Levant, Constantinople, &c.

There are no railways in Persia.

Peru.—Trade with Peru steadily increased up to 1878–1880, the date of the war with Chili; but since then the gross imports and exports with the United Kingdom barely reached 60 per cent. of what they were in the previous decade.

The average *aggregate* value of the import and export trade from 1860–1878 was 11 to 12 per cent., but after this date the value seriously declined, not reaching 4 per cent. in 1885.

In—

				p. c.		p. c.
1867,	the imports from	England to Peru	equalled	1.43	—exports,	3.7
1870,	,,	,,	,,	1.76	,,	4.88
1874,	,,	,,	,,	1.6	,,	4.5
1878,	,,	,,	,,	1.36	,,	5.23
1880,	,,	,,	,,	·31	,,	2.65
1885,	,,	,,	,,	·7	,,	1.88

Formerly, *guano* was the staple, as may be seen from the following:—

In—

					p. c.
1865,	the quantity	shipped was	210,800	tons, valued at	2.53
1870,	,,	,,	243,500	,,	3.24
1876,	,,	,,	156,900	,,	1.96
1880,	,,	,,	53,500	,,	·59
1884,	,,	,,	14,400	,,	.12

Practically bringing the guano trade of Peru to a nullity.

The *staple* exports to England are, besides guano, cubic nitre, sugar, wool, cinchona, copper, &c., in exchange for textiles, iron and coal. The *nitre* export is assuming vast dimensions, again reaching two million tons per annum of a value approximating to one million sterling. The movements have been as follows :—

In—		tons.		p. c.
1870,	the quantity shipped equalled	1,070,000,	at a value of	.83
1872,	,, ,, ,,	1,365,000,	,,	1.05
1874,	,, ,, ,,	1,900,000,	,,	1.13
1876,	,, ,, ,,	3,060,000,	,,	1.76
1880,	,, ,, ,,	650,000,	,,	.5
1885,	,, ,, ,,	1,800,000,	,,	.89

Railway mileage in 1873 was 1000; in 1878, 1300; and in 1885, 2000 miles.

Mining and agriculture are staple industries.

PORTUGAL.—Trade is principally with England (nearly 50 per cent. of the whole), followed by France and Brazil.

In—		p. c.		p. c.
1861-62,	the *total* imports equalled	3.21	—exports,	.9
1864,	,, ,, ,,	3.08	,,	.92
1881,	,, ,, ,,	7.4	,,	4.55
1884,	,, ,, ,,	7.25	,,	4.8
1885,	,, ,, ,,	8.25	,,	5.55

Trade with the United Kingdom was as follows :—

In—		p. c.		p. c.
1865,	the imports from England equalled	2.07	—exports,	2.47
1870,	,, ,, ,,	1.93	,,	3.02
1873,	,, ,, ,,	2.93	,,	4.32
1881,	,, ,, ,,	2.09	,,	3.35
1885,	,, ,, ,,	1.75	,,	2.67

The *staple* export to England is wine, followed by cork, ores, &c., in exchange for textiles, coal and iron.

The quantity of *wine* exported in 1869 equalled in value .88 per cent.; in 1870, .95 per cent.; in 1874, 1.26 per cent.; and in 1881, after having risen to 1.43 per cent. in 1872, the value fell again to .88 per cent.—keeping about the same during the next few years, being in 1885 valued at .91 per cent. The quantity of wine varied from 3½ million gallons in 1870 to 3¾ million gallons in 1874, 2¾ million gallons in 1881, and 3 million gallons in 1885.

The Portuguese Mercantile Marine in 1872 was 88,500 tons, and in 1885 100,000 tons.

Railways in 1872 extended 500, and in 1885, 950 miles.

Portuguese Colonies.—Macao is the most valuable, and turned over in 1882, 4.85 per cent.; followed by *Angola*, valued at 1.06 per cent. in 1884; *Mozambique*, .48 per cent. in 1884; *Cape Verdes*, valued at .28 per cent. in 1885; *St. Thomas*, .25 per cent. in 1882; and *Guinea*, valued at .11 per cent. in 1884.

ROUMANIA.—Commerce has largely increased within the last decade. Interchange is greatest with Austria, followed by England, Germany, France, &c. Austria's share is about 50 per cent. imports, and 25 per cent. exports, and England's about 25 per cent. of both imports and exports.

			p. c.		p. c.
The *total* imports in	1871,	equalled	3.32	—exports,	7.1
,, ,,	1880,	,,	10.21	,,	8.76
,, ,,	1881,	,,	11.00	,,	8.3
,, ,,	1884,	,,	11.8	,,	7.36

The principal exports are cereals, animal products, wood, &c., and imports, textiles, metals, leather. Trade with the United Kingdom is as follows:—

In—				p. c.		p. c.
1869,	imports from England	to Roumania	equalled	.9	—exports,	1.32
1870,	,,	,,	,,	.56	,,	1.05
1874,	,,	,,	,,	1.24	,,	.6
1884,	,,	,,	,,	.95	,,	3.13
1885,	,,	,,	,,	.8	,,	2.76

The *staple* exports are cereals (wheat, barley, and maize) in exchange for textiles, yarn, iron, &c.

The movements of the *staples* have been as follows :—

Cereals exported to England in 1873 equalled .84 per cent. ; in 1874, .59 per cent. ; in 1884, 3.09 per cent. ; and in 1885, 2.55 per cent.

Agriculture is the staple industry, employing three-fourths of the population.

Railway mileage in 1869 equalled 42, and in 1886, 910 miles.

RUSSIA.—Trade is carried on chiefly with England and Germany.

				p. c.		p. c.
The *total* imports in		1863,	equalled	20.72	—exports,	22.33
„	„	1865,	„	22.05	„	29.2
„	„	1868,	„	37.98	„	33.17
„	„	1870,	„	49.00	„	54.28
„	„	1872,	„	64.55	„	49.33
„	„	1880,	„	64.46	„	51.62
„	„	1882,	„	56.68	„	61.78
„	„	1884,	„	54.67	„	59.87

This summary shows a marvellous extension of commercial transactions in twenty years.

The trade of Russia is divided into four classes—(α) movements *viâ* the "Baltic ports;" (β) movements *viâ* the "White Sea ports;" (γ) movements *viâ* the "Black Sea and Sea of Azov ports;" and (δ) movements *viâ* the land frontiers, including Asia.

The movements were as follows :—In

			p. c.		p. c.
1872, imports, *viâ*	(α)	equalled about	30	—exports,	15
„	(β)	„	.12	„	1
„	(γ)	„	10	„	16
„	(δ)	„	20	„	14

And in

			p. c.		p. c.
1884,	(α)	equalled about	23	—exports, about	22.00
	(β)	„	.09	„	.8
	(γ)	„	8.00	„	18.00
	(δ)	„	22	„	17.00

	p. c.		p. c.
In 1884, imports to Finland equalled	5.5	—exports,	5.5
„ 1885, „ „	4.35	„	3.6
While in 1865 they were—imports,	2.5	„	1.29

The principal exports are cereals, flax, hemp, agricultural produce, &c., and imports miscellaneous.

Trade with the United Kingdom was as follows:—

In—				p. c.		p. c.
1865,	imports from	England to	Russia equalled	2.92	—exports,	17.38
1868,	„	„	„	4.24	„	20.05
1870,	„	„	„	7.00	„	20.56
1872,	„	„	„	6.6	„	24.32
1874,	„	„	„	8.77	„	18.93
1882,	„	„	„	5.77	„	21.05
1885,	„	„	„	4.2	„	17.71

The *staple* exports to England are cereals,—chiefly wheat,—flax, hemp, seeds, wood, wool, tallow, &c., in exchange for coal, machinery, textiles, &c.

Movements of the staples are as follows:—

Cereals exported to England 1870, equalled 977,375 tons; in 1874, 688,000 tons; in 1881, 585,900 tons; in 1884, 1,157,200 tons; and in 1885, 1,345,000 tons. In all cases except two (1883 and 1884), the exports from the southern ports a long way exceeded the exports from the northern. The value of the cereals exported in 1870, equalled 8.66 per cent.; in 1872, 12.33 per cent.; in 1874, 6.7 per cent.; in 1878, 8.33 per cent.; in 1881, 4.87 per cent.; in 1882, 10.93 per cent.; in 1883, 11.43 per cent.; in 1884, 7.55 per cent.; and in 1885, 8.77 per cent.

			p. c.		p. c.
Flax	in 1874,	equalled	3.46;	and in 1885,	2.9
Wood	„	„	4.33	„	3.04
Seeds	„	„	3.2	„	.53
Hemp	„	„	.6	„	.38

Agriculture is the *staple* industry. Mining also forms an important item. Tula and Perm are great centres of mineral working and factories; Finland also is a centre of the iron industry. Petroleum and mineral oils are extending as national industries. Coal, iron, platinum, naphtha, salt, copper, lead, zinc, and the precious metals are worked.

The Russian Mercantile Marine in 1870 numbered 181,000 tons; in 1874, 521,000 tons; and in 1884, 470,000 tons.

Railway mileage in 1874, equalled 10,500, and in 1885, 16,000 miles.

SERVIA.—The trade is carried on chiefly with Austria, although England, Turkey, Germany, &c., share.

The average *total* imports from 1870–1880 equalled 1.00 per cent., and exports 1.1 per cent., increasing in 1884 to 2.00 per cent. imports, and 1.55 per cent. exports.

The *staple* exports are animals (pigs especially), cereals, fruits, wines, prunes, &c.

Agriculture is the staple industry. Servia is also rich in minerals. The transit trade is considerable.

Railway mileage in 1886 was under 250 miles.

SIAM.—Commerce is very restricted, Bangkok being the centre of trade; a considerable trade is done with India, Hong-Kong, and Singapore.

	p. c.		p. c.
In—1874, the *total* imports equalled	.96	—exports,	1.22
1885, ,, ,,	1.13	,,	1.57

The *staple* exports are rice, teak, pepper, hides, &c.; and imports, textiles, opium, &c.

Direct trade with the United Kingdom is very small.

	p. c.		p. c.
In—1870, the imports equalled	.04	—exports,	.2
1873, ,, ,,	.03	,,	.03
1874, ,, ,,	.027	,,	.000
1881, ,, ,,	.02	,,	.03
1884, ,, ,,	.04	,,	.16
1885, ,, ,,	.05	,,	.096

The *staple* exports to England are rice and teak.

Spain.—Trade has steadily increased. It is divided in the following order:—France, about 48 per cent. of the whole; England, about 35 per cent.; and the United States, 10 per cent.

The *total* trade between 1865–1875 *averaged*—imports 19 per cent., and exports 12 per cent., and then rose. The yearly fluctuations were very great.

In—			p. c.		p. c.
1873,	the *total*	imports equalled	12.55—	exports,	32.56
1874,	„	„	15.28	„	16.12
1880,	„	„	28.48	„	25.72
1884,	„	„	31.18	„	24.77
1885,	„	„	22.15	„	24.00

The principal exports are wine, fruits, mineral ores, &c.; and imports, textiles, coal, machinery, &c.

Trade with the United Kingdom is as follows:—

In—				p. c.		p. c.
1865, the	imports from	England to	Spain equalled	2.35—	exports,	4.77
1870,	„	„	„	2.51	„	6.06
1873,	„	„	„	3.73	„	10.97
1874,	„	„	„	4.06	„	8.64
1877,	„	„	„	3.63	„	10.84
1880,	„	„	„	3.22	„	10.7
1883,	„	„	„	3.78	„	11.63
1884,	„	„	„	3.8	„	10.16
1885,	„	„	„	3.16	„	9.46

The *staple* exports to the United Kingdom are wine, fruits and mineral ores in exchange for textiles, iron and coal.

Movements of the staples:—

Wine exported in—

		p. c.			p. c.
1870, 7½	mil. gal. valued at	1.94—	1872, 8½	mil. gal. valued at	2.75
1874, 7½	„	2.28—	1876, 6¾	„	2.07
1880, 5⅓	„	1.47—	1882, 5	„	1.3
1884, 4½	„	1.14—	1885, 4	„	1.02

		p. c.		p. c.
Fruits	exported in 1874 equalled	1.46—	1885,	1.83
Ores	„ „	1.87	„	4.66

Agriculture and mining are the staple industries, with manufactures at a few centres.

Cotton is largely imported into Barcelona, Catalonia being the seat of the Spanish cotton trade. Spain trades largely with her own colonies, which consist, besides those named below, of islands in the Pacific Ocean and Fernando Po, &c.

Spanish mercantile marine equalled in 1860, 450,000 tons, in 1872, 360,000 tons, and in 1884, 500,000 tons.

Railway mileage in 1874 equalled 3800, and in 1885, 5650 miles.

SPANISH COLONIES.—*Cuba* and *Porto Rico.*—The chief trade is with Spain and Great Britain.

In—		p. c.		p. c.
1865,	the imports from England equalled	2.19	—exports,	5.06
1870,	,, ,,	2.51	,,	5.36
1873,	,, ,,	2.75	,,	5.1
1874,	,, ,,	1.85	,,	3.76
1885,	,, ,,	1.5	,,	.98

The *staple* export is sugar, followed by tobacco, coffee, &c., in exchange for textiles.

				p. c.		p.c.		p. c.
Sugar	exported in	1870,	equalled	4.67 ;	1872,	4.27 ;	1874,	2.6
,,	,,	1879,	,,	2.3 ;	1880,	.77 ;	1882,	.71
,,	,,	1884,	,,	.35 ;	1885,	.5		
Tobacco	,,	1874,	,,	.9 ;	1885,	.23		

Railway mileage in Cuba in 1885 was 900 miles.

Agricultural pursuits are the staple industries.

Philippine Islands.

		p. c.		p. c.
In 1867,	imports from England equalled	1.04	—exports,	.76
In 1873,	,, ,,	.43	,,	1.42
In 1885,	,, ,,	.95	,,	.98

The *total* imports in 1884 equalled 2.68 per cent., and exports 2.3 per cent.

The *staple* exports to the United Kingdom are sugar, hemp and tobacco, in exchange for textiles.

			p. c.		p. c.
Sugar exported in	1873	equalled	.65		
„ „	1885	„	.26,	and hemp	.66

SCANDINAVIA.—*Norway.*—Commerce is carried on chiefly with Great Britain, Germany, Sweden, Denmark, &c., and has steadily increased.

			p.c.		p.c.
The *total* imports from	1870–75	averaged	6.5	—exports,	5.
,, ,,	1880–85	,,	8.8	„	6.38

The principal exports are fish and timber; and the imports cereals, textiles, &c.

Trade with the United Kingdom is as follows:—

In—		p.c.		p.c.
1870,	imports from England to Norway equalled	.98	—exports,	1.85
1872,	,, ,, ,,	1.42	,,	2.37
1874,	,, ,, ,,	2.01	,,	3.00
1876,	,, ,, ,,	1.51	,,	2.68
1880,	,, ,, ,,	1.25	,,	2.72
1882,	,, ,, ,,	1.4	,,	2.92
1884,	,, ,, ,,	1.5	,,	3.01
1885,	,, ,, ,,	1.33	,,	2.83

The *staple* export is wood in exchange for coal, iron, and textiles.

Wood in 1874 exported, equalled 2.12 per cent., and in 1885, 1.27 per cent.

Norwegian Mercantile Marine in 1864 equalled 625,000 tons, in 1874, 1,220,000 tons, and in 1884, 1,600,000 tons.

Railway mileage in 1874 only equalled 280 miles, which had increased by 1885 to 970 miles.

Fishing is a staple industry, the product in 1884 being valued at 1.35 per cent.

SWEDEN.—Commerce is chiefly carried on with the United

Kingdom, Denmark, France, Germany, &c., and shows considerable increase.

In—

			p.c.		p.c.
1868,	the *total*	imports equalled	7.65	—exports,	6.64
1870,	„	„	7.87	„	8.47
1873,	„	„	15.08	„	12.32
1880,	„	„	15.7	„	12.5
1881,	„	„	16.00	„	12.4
1884,	„	„	18.1	„	13.2

The principal exports are timber, animals, cereals (oats), metals, &c., and imports, textiles, cereals, coal, &c.

Trade with the United Kingdom is as follows :—

In—

				p. c.		p. c.
1868,	imports from	England to Sweden	equalled	.62	—exports,	4.4
1870,	„	„	„	1.02	„	6.4
1874,	„	„	„	3.4	„	8.48
1878,	„	„	„	1.68	„	6.85
1880,	„	„	„	1.94	„	8.26
1884,	„	„	„	2.35	„	7.51
1885,	„	„	„	2.18	„	8.1

The *staple* exports to England are timber, oats, iron, and dairy produce, in exchange for textiles, coal, &c.

In—

1871,	*wood and timber*	exported to	England equalled	2.4	p.c.
1874,	„	„	„	4.33	„
1876,	„	„	„	4.4	„
1880,	„	„	„	3.6	„
1882,	„	„	„	3.4	„
1884,	„	„	„	3.03	„
1885,	„	„	„	3.13	„

In—

1874,	*oats*	exported to	England equalled	1.93	p.c.
1884,	„	„	„	.84	„
1885,	„	„	„	1.27	„

In—

1884,	*minerals*	exported to	England equalled	1.25	p.c.
1885,	„	„	„	1.08	„

Mining and agricultural pursuits are the staple industries.

In 1872 the railway mileage equalled 1100; in 1874, 1900; in 1875, 2250, and in 1885, 2390 miles.

The Mercantile Marine in 1867 numbered 238,000 tons; in 1873, 366,400 tons; and in 1884, 530,000 tons.

SWITZERLAND.—Trade with Switzerland is of course through other countries.

The total imports in 1883 equalled about 34.5 per cent., and exports 31.5 per cent.; in 1885 imports equalled 68.8 per cent., and exports 59.05 per cent. *Special* (home) commerce in 1885 equalled 30.21 per cent., and exports 26.4 per cent., and *general* commerce 38.59 per cent. and 32.65 per cent.

The principal trade is with Germany, France, Italy, &c. English traffic is of course included in the *transit* trade of one of these countries.

Agriculture and manufactures are staple industries.

Railway mileage in 1874 equalled 1020, and in 1885, 1925 miles.

Dairy produce is a *staple* export.

TRANSVAAL OR SOUTH AFRICAN REPUBLIC.—Commerce is carried on chiefly with England, the exports consisting of wool, ostrich feathers, ivory, cattle and products, gold, &c. The *total* imports equal about .6 per cent., and exports .6 per cent.

Mining and agriculture form staple industries, both of which might be largely increased.

TRIPOLI.—This country is a province of the Ottoman Empire, and its trade is included in the Turkish returns.

The direct trade with the United Kingdom in 1885 equalled, imports .39 per cent., exports .009 per cent. The principal exports are esparto, wool, madder, ivory, &c.

TURKEY.—Trade is carried on in the first place with Great Britain, then, a long way in the rear, by France, Austria, Russia, &c.

The *total* "turn-over" can only be given approximately.

		p. c.		p. c.
From—				
1870–80,	the *average* imports equalled about	19.00	—exports,	10.00
In—				
1881–82,	the *total* imports equalled about	17.5	„	10.1
1882–83,	„ „ „	18.2	„	9.96
1884–85,	„ „ „	18.65	„	11.5
1885–86,	„ „ „	18.00	„	11.00

In addition, the tobacco export in 1884–5 equalled 11.5 per cent., and in 1885–86 about 8.75 per cent.

The principal exports are cereals, fruits (raisins, figs, &c.), valonia, cotton, opium, oils, wools, gum, &c.; and imports, textiles, sugar, flour, coal, &c.

Trade with the United Kingdom is as follows:—

The imports and exports from England to Turkey equalled:—

	imports, p. c.	exports, p. c.		p. c.		p. c.
1870,	7.08	6.63;	thus European Turkey	4.95	and	4.66
			Asiatic Turkey	2.13	„	1.97
1874,	7.03	5.84;	thus European Turkey	4.63	„	3.58
			Asiatic Turkey	2.4	„	2.26
1881,	6.88	4.17				
1885,	6.13	4.68				

The *staple* export to England is corn (wheat, maize, &c.), followed by wool, goats' hair, valonia, opium, and fruits (raisins, sultanas, &c.) in exchange for coals, textiles, &c.

		p. c.		p. c.		p. c.		p. c.
Cereals exported equalled,	1870,	3.6	1872,	1.44	1874,	2.3	1875,	2.9
	1878,	1.25	1880,	.3	1882,	.75	1883,	1.34
	1884,	1.47	1885,	.96				
Wool and goats' hair „	1873,	.75	1874,	1.02	1883,	1.04	1884,	1.29
	1885,	.92						
Opium exported equalled,	1873,	.4	1883,	.45	1885,	.42		
Cotton „ „	1864,	1.56	1865,	1.24	1869,	.5	1870,	.37
	1871,	.08	1873,	.2	1874,	.03 practically		
Fruit „ „	1884,	.85	1885,	.79				[ceasing.

Agriculture is the staple industry.

The mercantile marine in 1883 numbered 72,000 tons.

Railway mileage—in 1865 there were less than 50 miles open, in 1873 there were 560 miles, and in 1885 1250 miles.

United States.—Trade has grown into vast dimensions, and is carried on first with Great Britain, followed by France, Germany, Belgium, &c.

In—

			p. c.		p. c.
1869,	the *total*	imports equalled	83.5	—exports,	87.82
1870,	„	„	92.47	„	105.9
1872,	„	„	114.5	„	112.36
1875,	„	„	110.78	„	128.61
1878,	„	„	87.41	„	136.15
1880,	„	„	133.4	„	164.8
1882,	„	„	144.95	„	146.65
1884,	„	„	133.34	„	145.00
1885,	„	„	115.5	„	145.3
1886,	„	„	127.08	„	133.2

The bullion and specie movements *not included* in the above are as follows:—

In—

			p. c.		p. c.
1870,	the imports	equalled	5.3	—exports,	11.6
1875,	„	„	4.18	„	18.42
1880,	„	„	18.6	„	1.87
1885,	„	„	8.65	„	4.88
1886,	„	„	7.7	„	10.4

The principal exports are cotton, cereals, dairy produce, tobacco, petroleum, &c.

Trade with the United Kingdom was as follows:—

In—

				p. c.		p. c.
1865,	imports from	England to U. S.	equalled	21.22	—exports,	21.62
1866,	„	„	„	28.5	„	46.85
1870,	„	„	„	28.33	„	49.8
1872,	„	„	„	40.74	„	54.66
1874,	„	„	„	28.24	„	73.9
1876,	„	„	„	16.83	„	75.9
1878,	„	„	„	14.55	„	89.14
1880,	„	„	„	30.85	„	107.08
1882,	„	„	„	30.97	„	88.35
1884,	„	„	„	24.42	„	86.27
1885,	„	„	„	21.99	„	86.47

Besides the interchange of some commodities as above, a large *transit* trade is carried on and *foreign* commodities exchanged; the *gross total* of the imports from England to United States in 1883, was 36.7 per cent.; in 1884, 32.74 per cent.; and in 1885, 31.1 per cent.

The *staple* exports to England are cereals and cotton, provisions, tobacco, cattle, petroleum, animal products, sugar, &c.

	Exported in—					
	1871.	1873.	1874.	1881.	1884.	1885.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Cereals . .	12.33	18.13	22.77	33.68	19.72	22.78
Cotton . .	33.09	31.54	29.3	31.2	30.84	26.5
Tobacco . .	1.75	1.88	1.97	...	...	2.57
Provisions .	6.40	9.8	9.89	...	...	12.02
Petroleum .	.6	.98	.98	...	...	2.15

(Provisions include bacon, hams, beef, salted; butter, cheese, lard, and pork, salted.)

Commodities in exchange are chiefly iron and textiles, with many other articles.

The cotton export now averages a weight of ten million hundredweights per annum.

The United States Mercantile Marine in 1872 numbered 4,150,000 tons; in 1874, 4,600,000 tons; and in 1885, 4,266,000 tons.

Railway mileage in 1830 was under 25; in 1840, it was 2800; in 1850, it was 9000; in 1860, it was 30,000; in 1870, it was 53,400; in 1880, 84,500; and in 1886, 129,000 miles; and is still being pushed rapidly forward.

The United States may be said to have many and every industry; mining is very important, producing mineral products valued in the total at nearly £90,000,000 sterling per annum.

Agricultural pursuits yield the enormous total of nearly 500 millions of pounds sterling; while all manufactures are prosecuted, especially iron and steel work, leather work, and cotton spinning.

The fisheries and forests, too, yield large returns.

Uruguay.—This country is one of England's best customers, and does an active trade first with England, then France, Brazil, the "States," Spain, &c.

In—

			p. c.		p. c.
1866,	the *total* imports	equalled	3.1	—exports,	2.6
1870,	„	„	3.00	„	2.4
1881,	„	„	3.6	„	4.4
1885,	„	„	5.5	„	5.5

The principal exports are animals and their products, and agricultural produce.

Trade with the United Kingdom is as follows:—

In—

				p. c.		p. c.
1865,	the imports	from England	equalled	.81	—exports,	1.25
1870,	„	„	„	.8	„	1.00
1874,	„	„	„	1.22	„	1.44
1881,	„	„	„	1.4	„	.4
1885,	„	„	„	1.4	„	.6

The *staple* exports to England are animal products, in exchange for textiles, coal, and iron.

		p. c.		p. c.
Hides exported in 1874,	equalled	.77;	and in 1885,	.2
Tallow „	„	.24;	„	.19

Railway mileage in 1874, equalled 230, and in 1885, 270 miles.

Agriculture is the staple industry.

Venezuela.—Trade has very largely increased during the last ten years; and is carried on principally with the "States," England, France, Germany, &c.

		p. c.		p. c.
From 1870–1874, the *total* imports	averaged	1.00	—exports,	1.2
Rising until in 1884, „	„	3.45	„	3.95

The *staple* export is coffee, followed by cacao, cotton, copper ore, dyewoods, &c.

Coffee export in 1874, equalled .03 per cent.; and in 1884, .45 per cent.

Trade with the United Kingdom was as follows:—

In—

				p. c.		p. c.
1870,	the imports	from England	equalled	.14	—exports,	.08
1874,	„	„	„	·5	„	.05
1881,	„	„	„	·48	„	.2
1885,	„	„	„	·33	„	.22

The *staple* export to England is copper ore—valued in 1875 at .17 per cent.,—followed by cocoa, declining from .02 per cent. in 1880, to .004 per cent. in 1885; coffee, declining from .015 per cent. in 1880 to .0007 per cent. in 1885,—in exchange for textiles, iron, machinery, &c.

Venezuela teems with agricultural and mineral resources,—the gold fields are the richest in the world.

Agriculture is the staple industry. The Mercantile Marine in 1885 equalled 25,000 tons.

Railway mileage in 1884 equalled 100 miles.

Zanzibar.—Trade is principally carried on with England, Germany, America, France, Arabia, &c. Before 1870 trade was practically *nil*, but has increased greatly since steam communication opened out the ports.

				p. c.		p. c.
The *total* imports	in	1880	equalled about	.7	—exports,	.87
„	„	1882	„	.8	„	1.00
„	„	1883	„	1.2	„	.8

The principal exports are ivory, caoutchouc, seeds, spices, &c.

Agriculture is the staple industry.

For adjacent coast (Mozambique), see Portuguese Colonies, page 417.

Afghanistan, *Beloochistan*, *Independent Tartary*, with *North* and *Central Asia*, have no *direct* trade with the United Kingdom, their commerce being included in the returns of other countries, which vary in accordance with the destination and demand.

The question now naturally arises—Why, given equal resources of, or aptitude for agricultural and mineral products in the various countries, the trade carried on with the United Kingdom should vary so much? Is there not in many of these "facts" and returns, as it were, a finger-post pointing out new fields of enterprise for British industry of all kinds?

THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND

WITH COLONIES AND DEPENDENCIES.

Commerce with the United Kingdom has ramifications in every direction. Previous to 1865 trade had *gradually* increased. In 1830, the *total* imports equalled 46.3 per cent.; exports, 69.7 per cent. In 1840, imports, 67.5 per cent.; exports, 116.5 per cent. In 1850, imports, 100.5 per cent.; exports, 197.3 per cent. In 1855, imports, 143.5 per cent.; exports, 116.7 per cent.; in 1860, imports, 201.5 per cent; exports, 164.52 per cent.

Year.	Total Imports.	Exports of Home Produce.	Exports of Foreign Produce.	Total Exports.
	p. c.	p. c.	p. c.	p. c.
1865	271.07	165.84	53.	218.84
1868	295.4	179.68	48.1	227.78
1870	303.25	199.58	44.5	244.08
1872	354.7	256.25	58.33	314.58
1874	370.08	239.55	58.1	297.65
1878	368.77	192.85	52.64	245.49
1880	411.23	223.06	63.34	286.4
1882	413.02	241.47	65.2	306.67
1884	390.02	233.02	62.94	295.96
1885	370.97	213.00	57.36	270.36
1886	349.38	212.37	56.1	268.47

Imports and exports include every available commodity, both raw material and manufactured articles. The relative position of each country, with regard to the total commerce of Great Britain, can be seen from the foregoing paragraphs.

Imports rank in the following order:—Food products, raw materials for textile manufactures, manufactured goods, &c.

Exports are as follows:—Textiles, metals, and products, manufactured goods, raw materials, &c.

Movements of bullion and specie are not included in the above tabulated list; these vary, but the average of the last ten years is 23.5 per cent. imports, and 24 per cent. exports.

The mercantile marine in 1860 numbered 4,300,000 tons; in 1870, 5.500,000 tons; in 1880, 6,300,000 tons; and in 1885, 7,200,000 tons.

The average yearly out-put of coal, from 1875–1885, was about 145,000,000 tons. Out-put of iron, from 1875–1885, was about 16,500,000 tons.

Railway mileage in 1860 equalled 10,400 miles; in 1870, 15,500 miles; in 1880, 18,000 miles; and in 1885, 19,200 miles.

The contract time for the mail service, from London to Bombay, is now (1887) 16 days, 17 hours, 45 minutes. From London to Shanghai is now (1887) 37 days, 13 hours, 45 minutes.

English colonies and dependencies are in the order of their trade:—India, Australasia, British North America, Cape Colony, Straits Settlements, Hong-Kong, West Indies, Ceylon, British Guiana, West Africa, &c.

India.—Trade in our great dependency shows a large increase from the middle of the present century. Commerce is carried on chiefly with England and Colonies, followed by China, France, Straits Settlements, United States, Italy, Belgium, &c.

In—			p. c.		p. c.
1865,	the *total* imports	equalled	49.51—	exports,	69.47
1870,	,,	,,	46.88	,,	53.5
1874,	,,	,,	38.39	,,	56.88
1880,	,,	,,	51.4	,,	69.1
1884,	,,	,,	65.58	,,	89.01
1885,	,,	,,	67.03	,,	85.09
1886,	,,	,,	67.29	,,	84.91
1887,	,,	,,	69.74	,,	90.12

These figures include merchandise *and* treasure; for comparison,

In—					p. c.		p. c.
1865,	the	*imports*	of merchandise	equalled	28.15—	bullion,	21.36
,,	,,	*exports*	,,	,,	68.03	,,	1.44
1870,	,,	*imports*	,,	,,	32.93	,,	13.95
,,	,,	*exports*	,,	,,	52.47	,,	1.03
1880,	,,	*imports*	,,	,,	39.74	,,	11.66
,,	,,	*exports*	,,	,,	67.17	,,	1.93
1882,	,,	*imports*	,,	,,	47.00	,,	11.32
,,	,,	*exports*	,,	,,	81.9	,,	1.1
1884,	,,	*imports*	,,	,,	52.7		12.88
,,	,,	*exports*	,,	,,	88.03	,,	.98
1885,	,,	*imports*	,,	,,	53.15	,,	13.88
,,	,,	*exports*	,,	,,	83.2	,,	1.89
1886,	,,	*imports*	,,	,,	51.8	,,	15.47
,,	,,	*exports*	,,	,,	83.83	,,	1.09
1887,	,,	*imports*	,,	,,	58.69	,,	11.05
,,	,,	*exports*	,,	,,	88.44	,,	1.68

The principal *general* exports are cereals and pulse, cotton, opium, seeds, &c.; and imports—textile manufactures, machinery, &c.

Trade with England was as follows:—

In—				p. c.		p. c.
1865,	the imports	from England	equalled	18.27—	exports,	37.4
1870,	,,	,,	,,	19.3	,,	25.1
1874,	,,	,,	,,	24.08	,,	31.2
1878,	,,	,,	,,	23.27	,,	27.47
1880,	,,	,,	,,	30.45	,,	30.12
1882,	,,	,,	,,	29.06	,,	39.92
1884,	,,	,,	,,	30.58	,,	34.45
1885,	,,	,,	,,	29.28	,,	31.88

The *staple* exports are cotton, wheat, jute, tea, seeds, indigo, rice, &c. *Wheat* was not considered a *staple* much before 1878 or 1879.

Cotton export equalled in	1865	1870	1874	1881	1882	1884	1885
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
	12.14	9.44	10.32	4.36	9.06	5.8	2.89

Wheat export equalled, 1881, 3.84 p. c.; 1883, 5.27 p. c.; 1884, 3.16 p. c.; 1885, 4.55 p. c.
Jute ,, ,, 1874, 3.54; 1881, 3.96; 1883, 4.52; 1885, 3.23.
Tea ,, ,, 1874, 1.56; 1881, 3.06; 1883, 3.7; 1885, 3.73.
Seeds ,, ,, 1881, 2.58; 1882, 3.6; 1884, 3.96; 1885, 4.19.
Indigo ,, ,, 1874, 1.66; 1881, 2.04; 1884, 2.14; 1885, 1.83.
Rice ,, ,, 1874, 3.24; 1881, 3.48; 1884, 2.09; 1885, 1.8.

In 1885, Indian export trade was divided approximately as follows:—Bengal, 50 per cent. of whole; Bombay, &c., 33 per cent.; Madras, 10 per cent.; and Burmah, 7 per cent.

Railway mileage, which in 1880 was 9300 miles, rose in 1886 to 12,300 miles.

AUSTRALASIA.—*New South Wales.*—Trade is chiefly carried on with England and her possessions.

In—

		p.c.		p.c.
1870,	total imports equalled	7.76	—exports,	8.00
1874,	,, ,,	9.26	,,	8.67
1881,	,, ,,	17.4	,,	16.05
1884,	,, ,,	22.8	,,	18.25
1885,	,, ,,	23.3	,,	16.54

The principal exports are wool, coal, tin, &c.; and imports—manufactured textiles, iron, &c.

Trade with England is as follows:—

In—

		p.c.		p.c.
1870,	imports from England equalled	2.6	—exports,	3.7
1874,	,, ,, ,,	4.38	,,	3.9
1881,	,, ,, ,,	7.3	,,	7.7
1884,	,, ,, ,,	8.4	,,	9.00
1885,	,, ,, ,,	9.1	,,	7.15

The *staple* export is wool—followed by copper, tallow, animal products, wine, &c.

Wool export to England in 1870 equalled 2.8 per cent.; in 1874, 2.6 per cent.; in 1881, 5.3 per cent.; and in 1885, 5.00 per cent.

The *weight* of wool exported to England in 1881 was 87,470,000 lbs.; in 1883, 100,630,000 lbs; in 1884, 120,220,000 lbs.; and in 1885, 110,106,000 lbs. out of 178,400,000 lbs.

Wine was made in 1885 to the extent of over half a million of gallons.

Agriculture and mining are staple industries.

Railways in 1874 extended 400 miles, and in 1885, 1700 miles.

Queensland.

In—

			p.c.		p.c.
1870,	total imports	equalled	1.58—	exports,	2.53
1873,	„	„	2.88	„	3.54
1881,	„	„	4.06	„	3.54
1884,	„	„	6.39	„	4.67
1885,	„	„	6.42	„	5.24

The principal exports are wool, gold, &c.; and imports, textiles.

In—

				p.c.		p.c.
1870,	imports	from England	equalled	.34—	exports,	.72
1874,	„	„	„	.87	„	.9
1881,	„	„	„	1.28	„	1.12
1884,	„	„	„	2.07	„	1.68
1885,	„	„	„	2.45	„	1.65

The *staple* export is wool, which was exported of a value in 1870 equalling .6 per cent.; in 1874, .63 per cent; in 1881, .88 per cent.; in 1884, 1.52 per cent.; in 1885, 1.39 per cent.

Other exports are tallow, preserved meat, fruits, &c.; in exchange for textiles and iron.

Agriculture and mining are staple industries. Sugar is being successfully cultivated.

Railways in 1874 extended 220 miles and in 1885, 1430 miles.

South Australia.—

In—			p. c.		p. c.
1870,	the *total*	imports equalled	2.03	—exports,	2.42
1874,	„	„	3.97	„	3.87
1881,	„	„	5.22	„	4.4
1882,	„	„	6.7	„	5.36
1884,	„	„	5.75	„	6.6
1885,	„	„	5.55	„	5.64

The principal exports are copper, wheat, flour, wool, wine, &c. ; and imports, textile and other manufactures.

Trade with the United Kingdom was as follows :—

In—				p. c.		p. c.
1870,	imports, England	to South Australia,	equalled	.82	—exports,	1.24
1873,	„	„	„	2.00	„	3.22
1874,	„	„	„	1.9	„	2.6
1881,	„	„	„	2.3	„	3.2
1885,	„	„	„	2.24	„	3.46

The *staple* export is wool, followed by wheat, flour, copper, wine, &c., in exchange for textile and iron manufactures, machinery, &c.

Wool export to England in 1870 was valued at .93 per cent. ; in 1872, 1.12 per cent. ; in 1874, 1.65 per cent. ; in 1881, 2.35 per cent. ; in 1884, 1.98 per cent. ; in 1885, 1.51 per cent.

The *total* export of wool in 1874 equalled 1.76 per cent. ; and in 1885, 1.6 per cent.

The *weight* of wool exported in 1874 was 31,653,000 lbs. ; and in 1885, 45,367,066 lbs.

Wheat and flour exported in 1873 equalled 1.7 per cent. ; in 1874, 1.2 per cent. ; in 1885, 2.16 per cent. ; of which the value sent to England equalled in 1874, .34 per cent. ; in 1881, .49 per cent. ; in 1884, .86 per cent. ; and in 1885, 1.6 per cent.

Copper was exported in 1873 equal to .77 per cent.; in 1874, .7 per cent.; and in 1885, .13 per cent.; of which the value to England equalled in 1874, .43 per cent.; in 1884, .18 per cent.; and in 1885, .9 per cent.

Agriculture is the staple industry. Mining operations are also well attended to.

The vine is now successfully cultivated, and in 1884, 473,535 gallons of wine were produced; while in 1885 the yield had risen to 600,000 gallons.

Railways in 1874 extended 135 miles; and in 1885, 1060 miles.

Victoria.—Commerce is principally carried on with England and the other colonies, Ceylon, France, China, the United States, Belgium, &c.

In—

		p. c.		p. c.
1865,	the total imports equalled	13.26	—exports,	13.15
1870,	„ „	12.46	„	12.47
1874,	„ „	16.95	„	15.44
1881,	„ „	16.72	„	16.25
1884,	„ „	19.2	„	16.05
1885,	„ „	18.04	„	15.55

The principal exports are, wool, gold, wheat and flour, animal products, &c., and imports, textiles, sugar, timber, &c.

Trade with England was as follows:—

In—

		p. c.		p. c.
1865,	the imports from England equalled	5.73	—exports,	4.4
1870,	„ „ „	4.3	„	5.78
1874,	„ „ „	6.93	„	7.00
1881,	„ „ „	6.23	„	9.01
1884,	„ „ „	6.66	„	7.67
1885,	„ „ „	6.7	„	5.33

The *staple* exports to England are wool and gold, followed by wheat and flour, meat, &c., in exchange for textiles, iron, machinery, &c.

Wool was exported to England in 1865 of a value equal to 3.99 per cent.; in 1870, 4.7 per cent.; in 1872, 4.27 per cent.; in 1874, 5.65 per cent.; in 1881, 7.3 per cent.; in 1884, 5.73 per cent.; in 1885, 3.98 per cent.

The *weight* of wool exported in 1865 was 43,600,000 lbs.; in 1870, 64,220,000 lbs.; in 1874, 86,215,000 lbs.; in 1881, 108,800,000 lbs.; in 1884, 99,350,000 lbs.; and in 1885, 83,200,000 lbs.

Gold exports in 1868 equalled 7.85 per cent.; in 1870, 6.12 per cent.; in 1874, 4.05 per cent.; in 1881, 3.43 per cent.; and in 1885. 2.94 per cent.; the number of ounces exported lessening from 1,960,000 in 1868, to 1,012,000 in 1874, 860,000 in 1881, and 735,000 in 1885.

Wheat and flour exports equalled in 1885 .4 per cent.

Tallow exports equalled in 1874 .26 per cent., and in 1885 .13 per cent.

Agriculture is the staple industry. There are a few manufactories and some mining.

Railways in 1874 extended 460 miles, and in 1885, 1740 miles.

Western Australia.

In—		p. c.		p. c.
1870,	the *total* imports equalled	.22	—exports,	.2
1874,	„ „	·37	„	·4
1881,	„ „	·4	„	·5
1885,	„ „	.65	„	·44

The principal exports are wool, ores, &c.

In—		p. c.		p. c.
1870,	the imports from England equalled	.1	—exports,	.08
1874,	„ „ „	.2	„	.18
1881,	„ „ „	.16	„	.26
1885,	„ „ „	.27	„	.27

The *staple* export is wool,—followed by lead ore, in exchange for textiles, iron, and machinery.

Wool export in 1870 equalled .084 per cent.; in 1874, .118 per cent.; in 1878, .146 per cent.; in 1881, .22 per cent.; in 1884, .24 per cent.; and in 1885, .23 per cent.

Lead ore export in 1874 equalled .01 per cent., and 1885 .003 per cent.

Agriculture is the staple industry, although the country is rich in minerals.

Railways in 1885 extended less than 100 miles.

Tasmania.—Commerce is almost confined to the United Kingdom and other British colonies.

In—			p. c.		p. c.
1870,	*total* imports	equalled	.8	—exports,	.65
1874,	,,	,,	1.26	,,	.9
1881,	,,	,,	1.43	,,	1.55
1884,	,,	,,	1.66	,,	1.47
1885,	,,	,,	1.76	,,	1.31

The principal exports are wool, fruits, timber, hops, tin, and gold, in exchange for textile and iron manufactures, &c.

In—			p. c.		p. c.
1870,	imports from England	equalled	.19	—exports,	.38
1874,	,,	,,	.36	,,	.44
1881,	,,	,,	.34	,,	.51
1884,	,,	,,	.52	,,	.37
1885,	,,	,,	.46	,,	.3

The *staple* export is wool.

Wool was exported to England in 1871 of a value equalling .28 per cent.; in 1874, .35 per cent.; in 1881, .41 per cent.; in 1884, .32 per cent.; and in 1885, .26 per cent.

The *total* export of wool in 1881 equalled .49 per cent., and in 1885, .26 per cent.

Agriculture is the staple industry.

Railway mileage is small. In 1874 there were under 50 miles, and in 1885 under 260 miles of rail.

New Zealand.—Commerce is mainly with the United Kingdom (three-fourths of the whole), the Colonies, "States," India, &c.

In—			p. c.		p. c.
1870,	*total* imports	equalled	4.6	—exports,	4.8
1872,	,,	,,	5.14	,,	5.2
1874,	,,	,,	8.12	,,	5.25
1881,	,,	,,	7.46	,,	6.00
1882,	,,	,,	8.6	,,	6.66
1884,	,,	,,	7.66	,,	7.1
1885,	,,	,,	7.48	,,	6.82

The leading exports are wool, frozen meat, tallow, flax, Kauri gum, &c., in exchange for textile and iron manufactures, &c.

Trade with the United Kingdom is as follows:—

In—				p. c.		p. c.
1870,	the imports	from England	equalled	1.54	—exports,	2.13
1874,	"	"	"	4.4	"	3.54
1881,	"	"	"	3.7	"	5.12
1884,	"	"	"	3.7	"	6.01
1885,	"	"	"	3.9	"	5.14

The *staple* exports are wool, cereals and flour, gum, tallow, frozen carcasses, &c.

Wool exports to England in 1870, equalled 1.75 per cent.; in 1872, 2.07 per cent.; in 1874, 2.88 per cent.; in 1881, 3.47 per cent.; in 1884, 3.79 per cent.; and in 1885, 3.26 per cent.

The *weight* of wool exported in 1870, was 30,750,000 lbs.; in 1874, 48,210,000 lbs.; in 1881, 59,370,000 lbs.; in 1884, 75,400,000; and in 1885, 78,600,000 lbs.

The *total* weight of wool exported in 1885 was 86,500,000 lbs.

			p. c.		p. c.
Cereals and flour	in 1874,	equalled	.3 ;	1885,	.63
Meat	"	"	.11 ;	"	.75
Kauri gum	"	"		"	.25

Agriculture and gold mining are the staple industries.

Gold was exported in 1874 to a value equal to 1.99 per cent.; in 1882, .92 per cent.; and in 1885, equal to .9 per cent. Coal is mined to the extent, at present, of half a million of tons per annum.

In 1874, railways extended 150 miles, which had increased to 1650 miles in 1885.

CANADA.—Trade is carried on chiefly with Great Britain and the United States.

In—

	p. c.		p. c.
1870, *total* imports equalled	14.96	—exports,	14.7
1874, " "	25.64	"	17.97
1878, " "	18.6	"	15.86
1880, " "	17.3	"	17.6
1884, " "	23.28	"	18.3
1885, " "	21.8	"	18.00

The principal exports are animals and animal products, timber, agricultural produce, &c.; and imports, textiles, iron, sugar, &c.

Trade with the United Kingdom was as follows:—

In—

	p. c.		p. c.
1865, imports from England to Canada equalled	4.77	—exports,	6.35
1870, " " "	6.26	"	7.85
1872, " " "	9.64	"	8.65
1874, " " "	8.85	"	11.36
1876, " " "	6.9	"	10.32
1878, " " "	5.9	"	8.88
1880, " " "	6.8	"	12.93
1882, " " "	9.11	"	9.87
1884, " " "	8.1	"	10.38
1885, " " "	6.83	"	9.96

The *staple* exports to England are grain, timber, and fruit, in exchange for manufactures.

	p. c.		p. c.
Cereals and Flour export in 1874 equalled	3.7;	in 1885,	1.83
Wood . . " "	5.7	"	3.6
Dairy Produce . " "	1.37	"	1.38

Agriculture is the staple industry.

Railways in 1874 extended 4000 miles, and in 1885, 10,775 miles.

The Canadian Mercantile Marine in 1874 equalled 1,160,000 tons, and in 1885, 1,200,000 tons.

Newfoundland and Labrador.—The principal and *staple* exports are fish and oil; and imports, provisions and manufactures.

In—

			p. c.		p. c.
1874,	total imports from	England equalled	.48	—exports,	.52
1875,	„	„	.46	„	.25
1881,	„	„	1.43	„	1.63
1884,	„	„	1.68	„	1.36
1885,	„	„	1.4	„	.95

Trade is first with the United Kingdom, then Portugal, Spain, "States," &c.

Fishing is the staple industry.

Cape Colony with Natal.—Commerce is chiefly carried on with Great Britain.

In—

			p. c.			p. c.
1870,	*total* imports	equalled	2.23	—exports,	excluding treasure,	2.57
1873,	„	„	5.45	„	„	4.01
1881,	„	„	9.22	„	„	4.14
1884,	„	„	5.25	„	„	3.94
1885,	„	„	4.77	„	„	3.16
					including treasure,	5.11

Treasure exports varied during these years between 1 and 2 per cent.

The principal exports are wool, ostrich feathers, diamonds, copper, hair, wine, &c., and imports textile manufactures, &c.

Trade with the United Kingdom was as follows:—

In—

				p. c.		including treasure. p. c.
1870,	imports from England	to Cape Colony	equalled	1.55	—exports,	2.43
1874,	„	„	„	3.53	„	3.63
1881,	„	„	„	5.9	„	4.94
1884,	„	„	„	3.05	„	5.3
1885,	„	„	„	2.84	„	3.83

The *staple* exports to England are wool, copper, feathers, &c., in exchange for manufactures.

Wool exported in 1870 equalled 1.84 per cent.; in 1874, 2.56 per cent.; in 1881, 3.03 per cent.; in 1884, 2.7 per cent., and in 1885, 1.7 per cent.

The *weight* of wool exported in 1870 was 28,814,000 lbs.; in 1874, 34,830,000 lbs.; in 1881, 47,160,000 lbs.; in 1884, 45.500,000 lbs., and in 1885, 38,850,000 lbs.

Copper export in 1874 equalled .25 per cent., and in 1885, .24 per cent.

Feathers.—Export in 1874 equalled .21 per cent., and in 1885, .9 per cent.

The value of *diamonds* exported in 1885 equalled 2.5 per cent.

Agriculture is the staple industry. The yield of wine in 1885 was 4½ million gallons.

In 1874 railways extended 135 miles, and in 1885, 1600 miles.

Natal.—Trade is almost exclusively with Great Britain.

In—

			p. c.		p. c.
1870,	the *total*	imports equalled	.43	and exports,	.38
1873,	"	"	.86	"	.65
1880,	"	"	2.34	"	.9
1884,	"	"	1.67	"	.96
1885,	"	"	1.52	"	.87

The principal exports are cereals, arrowroot, feathers, hair, wool, &c., and imports, machinery.

In—

			p. c.		p. c.
1870,	the imports from	England equalled	.31	and exports,	.44
1874,	"	"	.77	"	.66
1881,	"	"	1.2	"	.47
1884,	"	"	1.05	"	.64
1885,	"	"	.99	"	.62

The *staple* exports to England are wool, hides, sugar, feathers, &c.

Wool exports in 1870, equalled .25 per cent.; in 1872, .28 per cent.; in 1874, .4 per cent.; in 1878, .57 per cent.; in 1885, .47 per cent.

The *weight* of wool exported in 1885 was 18,000,000 lbs.

	p. c.		p. c.
Hides export in 1874, equalled	.17	; 1885,	.07
Sugar „ „	.016	; „	.04

Agriculture is the staple industry. There are excellent coal and iron fields.

Railways in 1885 extended under 175 miles.

STRAITS SETTLEMENTS.—Trade is carried on mainly with England, the Netherlands, Hong Kong, India, &c.

	p. c.		p. c.
The *total* imports in 1881, equalled	16.99	—exports,	13.96
„ „ 1884, „	20.04	„	18.67
„ „ 1885, „	19.77	„	18.00

The principal exports are tin, sugar, spices, india-rubber, and all East Indian produce, and imports opium, textiles, &c.

In—

	p. c.		p. c.
1881, imports, England to Settlements equalled	2.56	—exports,	3.78
1884, „ „ „	2.63	„	4.62
1885, „ „ „	2.55	„	4.44

The *staple* exports are tin, spices, india-rubber, cutch, &c., in exchange for coals, iron, and textiles.

Tin exports in 1885, equalled 1.34 per cent.; *spices*, .99 per cent.; *cutch*, .42 per cent.; and *india-rubber*, .32 per cent.

HONG KONG.—Commerce is carried on principally with England and colonies, the United States, Germany, &c.

	p. c.		p. c.
The English imports in 1870, equalled	3.4	—exports,	.28
„ „ 1874, „	3.65	„	.75
„ „ 1881, „	3.61	„	1 01
„ „ 1884, „	3.22	„	1.05
„ „ 1885, „	3.76	„	.97

The *staple* export is tea,—followed by all Chinese and Eastern goods in exchange for all English commodities.

Tea export in 1874, equalled .39 per cent., and in 1885, .4 per cent.

Hong Kong is an emporium, and it is estimated that the *transit* value of goods equals at least twenty millions sterling per annum.

THE WEST INDIES.

			p. c.		p. c.
Total imports from England in	1881	equalled	5.82	—exports,	5.68
,, ,, ,,	1884	,,	6.93	,,	6.72
,, ,, ,,	1885	,,	5·6	,,	5·77

The imports are the most important to Trinidad, Jamaica, Barbados, Bahamas, &c.

The exports are the most important from Trinidad, Jamaica, Grenada, Leeward Isles, &c.

Agriculture is the staple industry throughout the West Indies.

Principal exports are sugar, rum, molasses, coffee, cocoa, fruits, &c.

Principal imports are textiles, hardware, &c.

Railways in the West Indies in 1885 extended 145 miles.

CEYLON.—Trade is mainly with England and India.

In—

			p. c.		p. c.
1870,	*total* imports	equalled	4.63	—exports,	3.8
1874,	,,	,,	5·7	,,	4.68
1881,	,,	,,	4·42	,,	3·4
1884,	,,	,,	4.81	,,	3·16
1885,	,,	,,	4·23	,,	3·35

The principal exports are coffee, cocoa, cinchona, oil, tea, gems, &c. ; and imports coals, iron, and textiles.

In—

				p. c.		p. c.
1870,	English imports	into Ceylon	equalled	·9	—exports,	3.45
1874,	,,	,,	,,	1.16	,,	3.6
1881,	,,	,,	,,	.8	,,	2.13
1884,	,,	,,	,,	·74	,,	2·37
1885,	,,	,,	,,	·53	,,	2·39

The *staple* export to England is coffee—followed by cocoa-nut-oil, spices, tea, gems, cinchona, cacao, &c.; in exchange for coals and iron and textile manufactures.

Coffee exports in 1870 equalled 2.8 per cent.; in 1874, 2.87 per cent.; in 1879, 3.00 per cent.; in 1882, 1.63 per cent.; in 1884, .98 per cent.; and in 1885, .93 per cent.

		p. c.		p. c.
Cocoa-nut-oil	in 1874 equalled	.17	in 1885,	.12
Cinnamon	,, ,,	.12	,,	.06

Agriculture is the staple industry.

Railways in 1886 extended 180 miles.

British Guiana.—The *staple* exports are sugar, rum, and molasses—followed by timber, coffee, cocoa, &c.; and imports provisions, coal, and textiles.

In—

		p. c.		p. c.
1881,	*total* imports equalled	1.79	—exports,	2.6
1884,	,, ,,	2.00	,,	2.32
1885,	,, ,,	1.47	,,	1.8

Trade is with Great Britain to the extent of nearly seven-eighths of the whole.

The *sugar* export alone to England in 1885 equalled 1.13 per cent.

Agriculture is the staple industry.

West Africa—

In—

		p. c.		p. c.
1881,	imports to the whole *British* coasts equalled	1.25	—exports,	1.34
1884,	,, ,, ,,	1.73	,,	1.72
1885,	,, ,, ,,	1.42	,,	1.56

The *staple* exports are ground nuts, seeds, palm oil, kernels, ginger, wax, india-rubber, gold, and gum; and imports, textiles and manufactures.

Agriculture is the staple industry.

NORTH BORNEO.—The *staple* exports are sago, caoutchouc, gambier, spices, timber, and other East India produce.

Agriculture is the staple industry.

Minerals are abundant, but not worked.

	p. c.		p. c.
The imports in 1884 equalled only	.09—	exports,	.05
,, 1885 ,,	.13	,,	.08

MAURITIUS.—Trade is carried on with Madagascar, Great Britain, Cape Colony, India, Australia, &c.

In—

	p. c.		p. c.
1881, *total* imports equalled	2.47—	exports,	3.55
1884, ,, ,,	2.96	,,	3.94
1885, ,, ,,	2.28	,,	3 47

The principal exports are sugar, coffee, cocoa nuts and oil, vanilla, aloes, &c.; and imports, cattle and manufactures.

In—

	p. c.		p. c.
1881, imports from England equalled	.44—	exports,	.45
1884, ,, ,,	.38	,,	.36
1885, ,, ,,	.26	,,	.3

The *staple* export to England is sugar, followed by caoutchouc, drugs, &c.

Sugar export to England in 1885 equalled .18 per cent.

Agriculture is the staple industry.

Railways in 1885 extended 90 miles.

FIJI.—

In—

	p. c.		p. c.
1881, the *total* imports equalled	.28—	exports,	.17
1884, ,, ,, ,,	.78	,,	.34
1885, ,, ,, ,,	.62	,,	.33

Of this trade British possessions claimed about fourteen-fifteenths in 1881, and two-thirds in 1885.

In—

		p. c.		p. c.
1881,	imports from England equalled	.07—	exports,	.01
1884,	„ „ „	.12	„	.04
1885,	„ „ „	.03	„	.05

The *staple* export to England is oil-nuts, in exchange for textiles, iron and machinery.

Agriculture is the staple industry.

We have now traced the movements of commerce throughout the world; and although the United Kingdom still leads, there are not wanting signs that other nations are striving to reach the front. To maintain and increase our commerce must be our aim; to maintain the high "turnovers" we have with some countries, and to increase those countries' "turnovers" with which we at present only do comparatively small trade. To do this, and to retain it, we must use every effort both of mind and body, both by education and practice, to keep our supremacy *in excellency of work and at reasonable cost.*

But we must go with the times, and supply the *needs* of our customers. On this matter and on the question of British enterprise, are we as careful as formerly to do our *best* against all comers? See what the following authorities say:—

"Will Canadian manufactures ever enter into competition with British manufactures in the markets of the world? What lesson does the following extract from the letter of a Pekin correspondent of the *Times* teach?—

"A Canadian told me of his vain attempt to get things made in England as his customers required them. One of his articles, I remember, was axes, of which he sent drawings and wooden models till he was tired, but could never get the pig-headed makers to vary their traditional form. All the explanation he could get in reply to his complaints was, 'That was the way to make an axe.'"

The *Standard* of March 12, 1877, on the question "as to whether we are as careful as formerly to do our *best* against all comers," says :—

"The consular reports are sufficient to make people doubt whether British trade enterprise is what it once was, or British traders are the men they used to be." Referring to the cotton trade ;—"The Germans, in their slow, sure-footed way, are pushing themselves into, and Englishmen out of, the China trade. Last year they held an exhibition at Gotha, which was practical to a degree absolutely unattained by any show ever got up in this country. Minute inquiries were made in China by agents of German houses into the fancies and tastes of Chinese buyers of cotton goods. The very preferences of the people in the matter of wrappers for the cloth sent to China markets were studied, and full recognition was accorded to the fact that the Chinese merchant goes by marks, and that when once he has proved a certain stamp to be reliable, he buys the goods it covers without question or measurement ; all this, and much more, the Germans noted, and put before the manufacturers of Saxony for their guidance. We need scarcely say that such an exhibition was never heard of in Lancashire.

"The sluggishness of our present trade habits are equally illustrated by the British Vice-Consul at Tokio, Japan. In that progressive country we do not merely sit still and allow the traders of other nations to take business away from us, we actually allow ourselves to be beaten from the field by the Japanese themselves. So much is this the case that the people in 1885 imported seven million pounds' weight of cotton seed, with the object of growing the staple themselves. English goods are cheap but worthless, and the Vice-Consul officially reports that the consequence has been, that the Japanese have learnt that it is better to pay, at the moment, a higher price for a garment made of material woven in the country by hand, which will last a lifetime, than to purchase one of imported material without one-tenth of the wearing power.

"Precisely the same kind of story comes to us from Persia, where the English merchant is, by what is really neither more nor less than dishonest trading, allowing the Russians to beat him out of the field."

Continuing on this head: "It seems that for a time the Russians had difficulty in making their cloth of the proper breadth; but they have now overcome all that, and 'in cloth, printing, colours and designs of patterns Moscow samples compare favourably with those of Manchester.' It is not a question of the capacity of Manchester to produce better goods than Moscow, but of the disgracefully bad quality of the Manchester cottons now sent to Persia.

"Germans may be beaten off by the inherent weakness of their economic position, but there can be no conquering the Japanese and Chinamen themselves, once they get hold of European arts and learn to use European machinery. A sensible danger, therefore, besets our trade in woven tissues in the East, and it is quite time that producers at home awoke to the fact.

"'Nearly thirty years,' writes Mr. Vice-Consul Longford, 'have now elapsed since foreign merchants first began to reside in Japan; and, absurd as the statement may seem, . . . I believe I am not incorrect in stating that, taking them as a whole, they are not now one single step further towards a knowledge of the *bonâ fide* Japanese commercial classes than they were one year after the country was opened to them. That being so, is it any wonder that the imports of British goods in Japan have fallen off nearly £1,000,000 in six years?'

"The lesson taught by the state of English trade in these countries applies with more or less force to our commerce everywhere. But there is yet time for the English manufacturer to regain and retain his supremacy, *if he will only deal honestly and supply the needs of the consumer.*"

A *Homeward Mail* correspondent of 21st March 1887, referring to *Hiogo* and *Mozambique*, says:—"Bombay yarns appear to be supplanting English-made yarns in the consumption of these districts. The smaller cost of labour, the proximity of the field of production of the raw material, *and perhaps a closer study to the wants and tastes of the natives, through agents who reside here and know thoroughly their requirements*, have enabled Bombay millowners to compete successfully with those of Manchester."

To a casual reader, some of the foregoing paragraphs indicate a large increase of our British trade; but trade throughout the world has increased; and if these trade returns are carefully studied, it will be seen that *our increment has not been proportionate with the general increment.*

It is said that "the fall in prices more than counterbalances the apparent pecuniary deficit in any one year," or else that, "the amount represents a larger trade than is shown, if the returns were, or could be, calculated on a hard and fast line of good prices;" but all countries suffer alike in any given article of merchandise. It is very instructive to notice that where *internal* means of communication, whether canal, river, or rail are the most used, there the trade shows the healthiest movements.

Our figures correctly calculated show that although from 1870–1885 British, *i.e.*, the United Kingdom trade very considerably increased in the aggregate, still, that the rise has not been proportionate to the generally increased "turnover." In proof compare the figures for India, Australasia, the United States, Russia, and other representative trade-areas.

TABULATED LIST OF TOWNS OR TRADE CENTRES IMPORTANT IN BUSINESS.

THE *first* column contains the name of the place; the *second* the country, district, or island in which the place is situated; the *third* details the "local industry," or work done or specialty provided in the place; the *fourth* describes the *trade* of the place, which often is distinct from local industry; the *fifth* gives the nearest port or most convenient *shipping* port; the *sixth* the currency of the country; the *seventh* gives the *approximate* distance in English miles from London to the place, by the recognised or shortest routes;* and the *eighth* gives the *trade designation*—thus, any place with its convenient outlet at Odessa helps to constitute what is called generally the Black Sea Trade; Brody having its convenient outlet at Odessa, is tabulated as "Black Sea;" whilst Lyons has its natural outlet at Marseilles, and is tabulated as "Mediterranean Trade."

The abbreviations used are as follows:—

Agr	means	agriculture.
Brew	,,	breweries.
Camwd	,,	campeachwood
Chdly	,,	chandlery.
Chicry	,,	chicory.
Chmcl	,,	chemicals.
Cochnl	,,	cochineal.
Confect	,,	confectionery.
Cord	,,	cordage, sails, &c.
Crls	,,	cereals.
Crpts	,,	carpets.
Ctn	,,	cotton.
Ctl	,,	cattle.
Ctly	,,	cutlery.
Distil	,,	distilleries.
Dyewds	,,	dye-woods.
Flo	,,	flowered or embossed goods.
Flr	,,	flour.
Facty	,,	factories.
Fndy	,,	foundry.
Frts	,,	fruits.
Fshg	,,	fishing.
Gds	,,	goods.
Gld	,,	gold.
Gm	,,	gum.
Grd nuts	,,	ground nuts.
Hmp	,,	hemp.
Indgo	,,	indigo.
I′, C′, H′, E′ ware	,,	iron, copper, hard, or earthenware.
Implts	,,	implements.
Ivry	,,	ivory.
Jwlly	,,	jewellery.
Krnls	,,	kernels.

Lin	means	linen.
Lthr	,,	leather.
Mfc	,,	manufactures.
Mfc gds	,,	manufactured goods.
Mlls	,,	mills.
Mng	,,	mining.
Mnrls	,,	minerals.
Molss	,,	molasses.
Mor lthr	,,	morocco leather.
Op'm	,,	opium.
Porcl	,,	porcelain.
Poty	,,	pottery.
Prodc	,,	produce.
Puls	,,	pulse.
Prvs	,,	provisions.
Rfnry	,,	refinery.
Sgr	,,	sugar.
Shpbldg	,,	shipbuilding
Shipchdly	,,	shipchandlery.
Shipg	,,	shipping.
Skns	,,	skins.
Smltg	,,	smelting.
Spng	,,	spinning.
Spts	,,	spirits.
Tallw	,,	tallow.
Tan	,,	tannery.
Text	,,	textiles.
Thrd	,,	thread.
Tobac	,,	tobacco.
Trans	,,	transit.
Wd	,,	wood.
Wl	,,	wool.
Wlns	,,	woollens.
Wvg	,,	weaving.
1000 sea	,,	1000 miles from London *by sea*.

* These must vary with different readings of railway thoroughfares: for example, London to Paris by the *recognised* mail route, is *viâ* Dover and Calais, a distance of 283 miles; while the shortest, as regards mileage, is *viâ* Newhaven and Dieppe, being only 246 miles; then *viâ* Folkestone and Boulogne it is 255 miles. This example shows the discrepancies likely to arise, but care has been taken to select the *best* routes.

EUROPEAN.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Aachen (Aix-la-Chapelle)	Germany	cloth, needles	trade centre	Antwerp	thaler	340	General.
Aalborg	Denmark	sgr, soap, chdly, leather, ware, chocolate	cereals, flr, wool, cattle, tar	Aalborg	kroner	969	Baltic.
Aarhus	Denmark	sugar, soap, snuff, shoddy	cereals, flr, provisions	Aarhus	kroner	892	Baltic.
Abbeville	France	textiles, cord, packthread	produce, transit	Boulogne	franc	174	General.
Abo	Russia	sawing mills	wood, bar-iron, oats, prvs	Abo	rouble	1210 sea	Baltic.
Adrianople	Turkey	silk, otto roses, madder dye	wool, tobacco, bees-wax	Enos	lira	3062 sea	Black Sea.
Agen	France	agr, "prunes," shipchdly	important local	Bordeaux	franc	653	General.
Agram	Austria	silk, porcelain, tobacco	local	Fiume	florin	1254	Medit.
Aguilas	Spain	mining	esparto, ore, lead	Aguilas	real	1525 sea	Medit.
Aix	France	olive oil, confect, text, fruit	produce, manufactures	Marseilles	franc	819	Medit.
Ajaccio	Corsica	agriculture	wood, wine, rags, maize, oil, fruit	Ajaccio	franc	2150 sea	Medit.
Alcoy	Spain	paper-cigars, sugarplums	agr prodc, manufactures	Denia	peseta	1728 by Denia	Medit.
Alcudia	Majorca	agriculture	barley, provisions	Alcudia	peseta	1855 sea	Medit.
Alençon	France	lace, cloth, glass	local transit	Caen	franc	406	General.
Alessandria	Italy	textiles, wax candles	local	Genoa	lira	827	Medit.
Algesiras	Spain	textiles	fruit, leather	Algesiras	peseta	1320 sea	Medit.
Alghero	Sardinia	agriculture	wine, wool, skins, prvs	Alghero	franc	2075 sea	Medit.
Alicante	Spain	esparto	lead, fruit, wine	Alicante	peseta	1467	Medit.
Alkmaar	Holland	dairy produce centre	cheese, local transit	Amsterdam	guilder	257	General.
Almaden	Spain	quicksilver mining	produce	Lisbon, Cadiz	peseta	1243 *viâ* Lisbon	General.

Almazarron	Spain	mining	minerals, esparto	Almazarron	peseta	1545 sea	Medit.
Almèria	Spain	soap, textiles	lead, esparto, fruit	Almeria	peseta	1468 sea	Medit.
Alost (Aalst)	Belgium	textiles, distilleries	hops, corn, oil	Antwerp	franc	226	General.
Altenburg	Germany	spinning, weaving	cattle, corn, wood, wool	Hamburg	thaler	758	General.
Altona	Germany	tobacco, breweries	transit for Hamburg	Hamburg	thaler	671	General.
Amiens	France	textiles, spinning flax, hemp, patés de canard	transit goods	Boulogne	franc	202	General.
Amsterdam	Holland	banking, text, trade centre	trade centre, pulse, gin	Amsterdam	guilder	379	General.
Ancona	Italy	shipg centre, coal station	grain, hemp, rags	Ancona	lira	1213	Medit.
Angers	France	rope, canvas, cordage	cereals, pulse, wine, prvs	Nantes	franc	499	General.
Angouleme	France	brandy, paper, woollens	transit	Bordeaux	franc	559	General.
Annonay	France	text, tanning, paper mills	important local	Marseilles	franc	635	Medit.
Antwerp	Belgium	trade centre	trade centre	Antwerp	franc	271	General.
Archangel	Russia	saw mills, shipping	crls, deals, flax, oil, pitch	Archangel	rouble	2019 sea	White Sea.
Arensburg	Russia	agriculture, shipping	cereals, wood, provisions, tallow, hides	Arensburg	rouble	1197	Baltic.
Argostoli	Greece	cotton, pottery	valonea, currants	Argostoli	drachma	2559 sea	Medit.
Arles	France	hats, silk, mills, sausages	entrepôt	Marseilles	franc	767	Medit.
Arnhem	Holland	earthenware, soap	transit	Rotterdam	guilder	268 *viâ* R'dam	General.
Arras	France	central corn, hosiery, mills	agricultural produce, mfc	Calais	franc	178	General.
Assen	Holland	agriculture	transit produce	Amsterdam	guilder	325	General.
Assens	Denmark	agriculture	cereals	Assens	kroner	720 sea	Baltic.
Asti	Italy	spinning	local	Genoa	lira	805	Medit.
Astracan	Russia	manufactures, fishing	silks, cottons	Azov	rouble	4110 sea	Black Sea.
Athens	Greece	general trade	general	Piræus	drachma	2710 sea	Medit.
Aubusson	France	carpets, weaving	salt, wine, pulse	Bordeaux	franc	558	General.
Augsburg	Bavaria	spinning, printing, bankg	local	Venice, Trieste	florin	791	Medit.
Augusta	Sicily	agriculture	salt, oil, honey, wine	Augusta	lira	2320 sea	Medit.
Avignon	France	silk spinning	produce entrepôt	Marseilles	franc	745	Medit.
Aviles	Spain	copper, earthenware, mng	coals, ware	Aviles	peseta	830 sea	Medit.
Avola	Sicily	agriculture	wine, locust beans, oil, prvs	Avola	lira	2299 sea	Medit.
Baccarat	France	calico, ctn stuffs, chmcls	timber	Antwerp	franc	432	General.
Badajos	Spain	textiles	local	Lisbon	peseta	1557	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Baljik	Turkey	agriculture, shipping	wheat, barley	Baljik	lira	3253 sea	Black Sea, Medit.
Barcelona	Spain	trade centre, textiles	trade centre, wine, fruit	Barcelona	peseta	1873 sea	Medit.
Barfleur	France	agriculture	potatoes, flax, hemp, prvs	Barfleur, Cherbourg	franc	495 *viâ* Paris	General.
Bari	Italy	salt, agriculture	wine, fruit, barley	Bari	lira	1389	Medit.
Barletta	Italy	agriculture, salt, fishing	cereals, fruit, wool, wine	Barletta	lira	1355	Medit.
Barmen	Germany	ribbons, tapes, turkey red dye	local transit	Rotterdam, Antwerp	thaler	423	General.
Basle	Switzerlnd	trade centre	trade centre	Genoa	franc	608 *viâ* Paris	Medit.
Batoum	Russia	mining, transit, shipping	petroleum, grain	Batoum	rouble	3970 sea	Black Sea.
Bautzen	Germany	textiles, tobacco	manufactures, transit	Stettin	thaler	838	Baltic.
Bayeux	France	tapestry, textiles	transit, agricultural produce, manufactures	Caen	franc	444	General.
Bayonne	France	spirits, wine, sawmills	wood, wines, spirits	Bayonne	franc	770	General.
Beaupreau	France	agr, textiles, horse fairs	cattle, textiles	Nantes	franc	481	General.
Beauvais	France	important cloth, cotton, tapestry	extensive local transit	Boulogne	franc	206	General.
Beja	Portugal	pottery, tannery, bees, goats, swine	local transit	Lisbon	milreis	1158 *viâ* Lisbon	General.
Belgrade	Servia	carpets, silks	transit, shipping	Danube	florin	1572	Black Sea.
Berdiansk	Russia	agriculture	cereals, pulse, wool, skins	Berdiansk	rouble	3610 sea	Black Sea.
Bergamo	Italy	silk, cotton, wool, earthenware	corn, wine, oil, whetstones, perfume, ironware	Genoa	lira	896	Medit.
Bergen,	Norway	tobacco, spinning, candles, rope, shipbuilding	wood, fish, oil	Bergen	kroner	680 sea	Norwegian.
Berlin	Germany	silks, textiles, centre	trade centre	Hamburg	thaler	746	General.
Besançon	France	watchmaking	produce, ironwork, provisions	Marseilles	franc	526	Medit.

Beziers	France	brandy, textiles	wool, cereals, verdigris, soda, produce	Marseilles	franc	738	Medit.
Bielefeld	Germany	thread, linen, meerschaum	transit, local	Bremen	thaler	528	General.
Biella	Italy	textiles, silk	silk, chestnuts	Genoa	lira	818	Medit.
Bilbao	Spain	textiles, ironware, copperware, shipbuilding, mng	iron ore	Bilbao	peseta, real	810 sea	General (ore).
Björneborg	Russia	sawmills	deals, battens, boards	Björneborg	kroner	1310 sea	Baltic.
Bleiberg	Austria	centre lead mining	trade centre	Trieste	florin	1530	Medit.
Blois	France	brandy, cereals, fruit, gloves, leather	extensive transit	Nantes	franc	393	General.
Bologna	Italy	silks, velvets, sausages	canal transit	Ancona	lira	977	Medit.
Bonifacio	Corsica	important coral fishery	shipping produce	Bonifacio	franc	2153 sea	Medit.
Bordeaux	France	trade centre	trade centre	Bordeaux	franc	646	General.
Bornholm	Sweden	agriculture	cereals	Bornholm	kroner	810 sea	Baltic.
Bosna-serai	Turkey	ironware, copperware, textiles, morocco leather	trade centre	Ragusa	lira	2905 sea	Medit.
Botzen	Austria	silk, textiles	local	Trieste	florin	999	Medit.
Boulogne	France	textiles, foundry, fishing	cement, provisions, transit	Boulogne	franc	116	General.
Bourgas	Turkey	pottery	pipeclay, cereals	Bourgas	lira	3240 sea	Black Sea.
Bourges	France	textiles, agriculture	cereals, wool, hides, wood, hemp, flannel	Nantes	franc	578	General.
Braga	Portugal	hats, shoes, ironware, cloth	local transit	Oporto	milreis	907 *viâ* Oporto	General.
Brake	Germany	wool, shipping, transit	cattle, cereals, pulse, prvs	Brake	thaler	605	General.
Bremen	Germany	trade centre, textiles, sgr, tobacco, shipbuilding	woollens, toys, cereals, glass, wool, transit	Bremen	thaler	599	General.
Bremerhaven	Germany	transit, shipping	shipping port of Bremen	Brem'haven	thaler	630	General.
Brescia	Italy	iron, silk, textiles	firearms	Venice	lira	914	Medit.
Breslau	Germany	wool, silk, textiles, lithography	metals, wood, cereals	Stettin	thaler	976 *viâ* Berlin	Baltic.
Brest	France	shipping, agriculture	barley, potatoes, farm produce	Brest	franc	670 *viâ* Paris	General.
Brindisi	Italy	shipping, transit	oil, wine, fruit, prvs, transit	Brindisi	lira	1458	Medit.
Brody	Austria	tannery, linen, transit	provisions, transit, cattle	Odessa	florin	1626 *viâ* Vienna	Black Sea.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Bruges	Belgium	linen, damask, textile	lace, rags, bones, fruit	Ostend	franc	150	General.
Brunn	Austria	wool, silk, cotton	transit centre	Trieste	florin	1141 *viâ* Vienna	Medit.
Brunswick	Germany	text, tobacco, chicory, lthr	entrepôt	Hamburg	thaler	666	General.
Brussels	Belgium	lace, carpets, woollens, centre	glass, iron, sugar, marble, transit	Ostend, Antwerp	franc	244	General.
Bucharest	Wallachia	gold, silver work	agriculture, produce	Danube	florin	1848	Black Sea.
Buda	Hungary	wines, textiles	wines, transit	Danube	florin	1234	Black Sea.
Burgos	Spain	paper, hats, linen, silk	agriculture	Bilbao	peseta	892	General.
Burriana	Spain	agriculture, fishing	locust beans, oranges, fruit, wine	Burriana	peseta	1762 sea	Medit.
Cadiz	Spain	wine, salt, fruit, entrepôt	transit entrepôt	Cadiz	peseta	1635	General.
Caen	France	angora wool, gloves, hats, lace, textiles, porcelain, cutlery, shipping	provisions, produce, gloves	Caen	franc	432 by Paris	General.
Cagliari	Sardinia	tobacco, cotton, soap, agriculture	salt, produce, saffron	Cagliari	franc	2165 sea	Medit.
Calais	France	bobbin net, oil, soap, shipg	spts, salt, cereals, transit	Calais	franc	99	General.
Calamata	Greece	silk handkerchiefs	wool, raw silk, figs	Calamata	drachma	2745 sea	Medit.
Calix	Sweden	wood, timber working, shipbuilding	transit produce	Calix	kroner	1542 sea	Baltic.
Cambrai	France	cambric, text, beet-sugar	agr produce, transit, mfc	Calais	franc	188	General.
Candia	Crete	soap, agriculture	honey, cheese, soap, fruit	Candia	piastre	2815 sea	Medit.
Cannes	France	perfumes, fishing, agriculture	fish, fruit, produce	Cannes, Nice	franc	940	Medit.
Carloforte	Sardinia	mining, fishing	salt, coral, anchovy	Carloforte	franc	2020 sea	Medit.
Carlscrona	Sweden	sugar refinery, tobacco, shipbuilding	wood, local manufactures	Carlscrona	kroner	867 sea	Baltic.
Carlshamn	Sweden	wood working, marine stores, tobacco	agriculture, produce, wood	Carlshamn	kroner	866 sea	Baltic.

Carlsruhe	Germany	chemicals, machinery, tobacco	transit centre	Antwerp, Rotterdam	thaler	652 *viâ* Orient	General
Carlstadt	Sweden	agriculture, wood, timber working	agriculture,produce,wood	Uddewalla	kroner	726 *viâ* U.&lake	Baltic.
Calmar	Sweden	textiles, tobacco, shipbuilding, sugar refinery	agriculture,produce,wood	Calmar	kroner	768 sea	Baltic.
Carthagena	Spain	smelting, compressing	ores, esparto	Carthagena	peseta	1511	Medit.
Cassell	Germany	textiles, e'ware, hardware	local manufacture, transit	Bremen	thaler	547	Medit.
Castellamare	Italy	textiles, tanning	transit	Castellamare	lira	1447	Medit.
Catania	Sicily	silk, amber	prodc, manna, soda, wine	Catania	lira	2348 sea	Medit.
Cattaro	Austria	provisions, produce	transit, shipping	Cattaro	florin	2770 sea	Medit.
Cavalla	Turkey	agriculture	tobacco, cotton, cereals	Cavalla	lira	2970 sea	Medit.
Cette	France	wines, shipping, foundry	wines, salt, provisions	Cette	franc	825	Medit.
Cettinge	Turkey	gunpowder	transit	Cattaro	lira	2790 sea	Medit.
Chablis	France	centre white wine, confect	wine	Havre	franc	416	General.
Chambery	France	manufactures, silk gauze	transit, agricultural prodc	Marseilles	franc	641	Medit.
Chalons	France	hats, vinegar, oil, dyeworks, wines	entrepôt, transit	Abbeville	franc	377 *viâ* Paris	General.
Chatellerault	France	cutlery centre, lace, jwlly	transit	La Rochelle	franc	466 *viâ* Paris	General.
Charente	France	brandy, wine	brandy, wine	Charente	franc	579	General.
Chateauroux	France	manufactures, swords, textiles, tanning, dyeing	transit, cereals, produce	Nantes	franc	431 *viâ* Paris	General.
Charleroi	Belgium	cloth, cutlery, glass	entrepôt, transit	Antwerp	franc	289 *viâ* Brussels	General.
Chatres	France	cereal centre, text, leather	agriculture, produce, mfc	Havre	franc	335	General.
Chaumont	France	flour, woollens, hosiery	iron, cutlery, gloves	Abbeville, Marseilles	franc	445	Intermed.
Chateaudun	France	blanket manufactures	agriculture, produce	Nantes	franc	360	General.
Chemnitz	Germany	stockings	textiles	Hamburg	thaler	701	General.
Cherbourg	France	dockyard, shipping	eggs, mules, salt, transit	Cherbourg	franc	497	General.
Chiavari	Italy	lace, silk, fishing	anchovy, wine, silk, olives	Chiavari	lira	919	Medit.
Chioggia	Italy	cord, lace, shipbuilding	coasting, fish	Chioggia	lira	2965 sea	Medit.
Christiania	Norway	breweries, ironware, text	wood, iron	Christiania	kroner	656 sea	Baltic.
Christiansand	Norway	sailcloth, distilleries	logs, deals, lobsters	Christ'sand	kroner	511 sea	Baltic.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Christianstadt	Sweden	gloves, agriculture, textiles	agricultural produce, mfc	Christ'stadt	kroner	851 sea	Baltic.
Christiansund	Norway	fishing	wood, fish	Christ'sund	kroner	915 sea	Baltic.
Ciudad Real	Spain	coarse woollens	cereals	Lisbon, Seville	peseta	1348	General.
Civita Vecchia	Italy	cotton, alum work; shipping	wood, cereals, pumice-stone, alum	C. Vecchia	lira	1219	Medit.
Clermont Ferrand	France	textiles, preserved fruits	linen, provisions, produce, transit	Marseilles	franc	556	Medit.
Cognac	France	brandy distilleries	brandy, cereals, hemp	Rochefort	franc	589	General.
Cologne	Germany	yarn, text, eau de Cologne	central entrepôt	Rotterdam	thaler	393	General.
Colberg	Germany	salmon, lamprey fishing	fish, salt	Colberg	thaler	861 sea 916 by rail	Baltic.
Como	Italy	metal foundry, agr, text	rice, silks	Genoa	lira	911	Medit.
Cone	France	noted cutlery, anchors	transit, manufactures	Nantes	franc	390	General.
Constantinople	Turkey, E.	trade centre, leather, fez caps	trade centre	Constantinople	lira	3090 sea	Black Sea.
Copenhagen	Denmark	shipping centre	coaling shipping centre	Copenhagen	kroner	715 sea	Baltic.
Cordova	Spain	cotton, wool, leather	sugar, coffee, tobacco	Seville	peseta	1459	General.
Corfu	Greece, I.	agriculture	olive oil, currants	Corfu	drachma	2585 sea	Medit.
Coron	Greece	agriculture, mills	oil, silk	Coron	drachma	2645 sea	Medit.
Coruña	Spain	glass, cotton, fishing	cereals, legumes, salt fish, cotton tissues	Coruña	peseta	840 sea	General.
Courtrai	Belgium	table linen, muslins, lace	thrd blonde, ctn, flannels	Ostend	franc	170	General.
Cracow	Russia, E.	agriculture, local industry	local	Stettin	rouble	1391	Baltic.
Crefeld	Germany	text centre, chemcl, tobac	trade centre	Bremen, Antwerp	thaler	374	General.
Cremona	Italy	mustard, textiles, colours	violins, earthenware, manufactures	Genoa	lira	1095	Medit.
Cronstadt	Russia, E.	trade shipping centre	cereals, wood, centre	Cronstadt	rouble	1365 sea	Baltic.

Czernowitz	Austria	clocks, silverplate, carriages	German transit	Galatz	florin	1768 *viâ* Vienna Cracow	Black Sea.
Dannemora	Sweden	steelwork centre	iron, steel	Osthammar	kroner	1191	Baltic.
Dantzic	Germany	tobac, starch, beer, brandy	cereals, wood, transit	Dantzic	thaler	1030 *viâ* Berlin	Baltic.
Debretzen	Austria	coarse textiles, cooperage, soap, tobacco, pipes	transit, Hungary produce	Fiume, Danube	florin	1372 *viâ* Vienna	Intermed.
Delft	Holland	pottery, arms, ironwork	local	Rotterdam	guilder	209	General.
Denia	Spain	shipping	fruit, potatoes, honey, wd	Denia	peseta	1698 sea	Medit.
Dessau	Germany	textiles, worsted, musical instruments	local	Stettin, Hamburg	thaler	786 *viâ* Halle	Intermed.
Dieppe	France	ivory, fishing, shipbuilding, saw mills	wood, manufactures, transit	Dieppe	franc	124 direct	General.
Dijon	France	cloth, hosiery, blankets, chemicals, foundry	wine, manufactures	Marseilles	franc	479	Medit.
Dordrecht	Holland	oil, steel pens, glass	coal, lime, grain, wood	Rotterdam, Dordrecht	guilder	446 *viâ* Brussels & Liege	General.
Dortmund	Germany	textiles, nails, tobacco, breweries, vinegar	corn, colonial produce	Antwerp	thaler	467	General.
Dragomestre	Greece	agriculture	valonea, wood	Dragomestre	drachma	2627 sea	Medit.
Drammen	Norway	leather, cord, tobacco, distilleries, breweries	wood, pulp, iron, staves	Drammen	kroner	645 sea	Baltic.
Dresden	Germany	textiles, general, education	local transit	Stettin	thaler	828 *viâ* Halle	Baltic.
Drontheim	Norway	fishing	timber, fish	Drontheim	kroner	1005 sea	Norwegian.
Dulcigno	Turkey, E.	agriculture, fishing	corn, oil, produce	Dulcigno	lira	2647 sea	Medit.
Dunkirk	France	earthenware, ironwork, distilleries, breweries, refinery	centre, transit	Dunkirk	franc	124	General.
Dusseldorff	Germany	liqueurs, sugar, tobacco, textiles	agriculture produce, transit	Antwerp, Rotterdam	thaler	417	General.
Ebensee	Austria	salt-mining	salt	Trieste	florin	1052	Medit.
Eisenerz	Austria	steel, ironmongery centre	trade centre	Trieste	florin	1132	Medit.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Eisleben	Germany	potash, tobacco, mining, textiles	cereals, manufactures	Hamburg	thaler	712	General.
Ekesjo	Sweden	agriculture	cattle, cereals, agricultural produce	Oscarhamn	kroner	881 *viâ* Malmo	Baltic.
Elberfeld	Germany	cotton, dye	manufactures	Antwerp	thaler	434	General.
Elbing	Germany	soap, tobacco, refining sugar, chicory, shipbuilding	important transit	Elbing	thaler	1021 sea	Baltic.
Elbœuf	France	soap, chemicals, machinery for textiles	textiles, entrepôt	Rouen	franc	177 direct	General.
Elche	Spain	agriculture, dates, textiles, wines	produce, manufactures	Alicante	peseta	1650 *viâ* Alicante	Medit.
Elsinore	Denmark	shipping, commerce	coaling station	Elsinore	kroner	692 sea	Baltic.
Emden	Germany	hosiery, leather, chmc, soap, tobacco, oil mills, breweries, distilleries	oats, produce	Emden, Leer	thaler	604 *viâ* Brussels	General.
Empoli	Italy	straw bonnets, beaver hats, earthenware	agricultural produce	Leghorn	lira	1025 *viâ* Genoa, 1082 *viâ* Florence	Medit.
Ems	Germany	seltzer water	manufactures, produce	Antwerp	thaler	430	General.
Enos	Turkey, East	transit port for Adrianople	transit port for Adrianople	Enos	lira	2970 sea	Black Sea, Medit.
Epernay	France	pottery, text, dye, tannery	wine, building & fire wood	Abbeville	franc	363	General.
Epinal	France	parchment, pottery, ctly	agricultural produce	Calais	franc	436	General.
Erfurt	Germany	iron work, textiles, tobacco	minerals	Hamburg, Bremen	thaler	732	General.
Erlau	Hungary	textiles, combs, leather	manufactures	Fiume, Danube	florin	1433 *viâ* Vienna & Pesth	Intermed.

Essen	Germany	Krupp s works, textiles, leather, vitriol	colonial produce, drugs, wine, wool, coal	Antwerp	thaler	535	General.
Eupatoria	Russia, E.	salt mining	salt, grain, skins	Eupatoria	rouble	3460 sea	Black Sea
Evora	Portugal	ironware, leather	local	Lisbon	milreis	1158 by sea to Lisbon	General.
Fahlun	Sweden	mining centre, textiles, tobacco	trade centre	Gefle	kroner	1297 sea	Baltic.
Fécamp	France	cottons, sawmills, marine stores	wood, salt, colonial produce	Fécamp	franc	194 *viâ* Dieppe	General.
Ferrol	Spain	cutlery	produce, manufactures	Ferrol	peseta	810 sea	General.
Figueira	Spain	shipping	salt, oil, vinegar, fruits	Figueira	peseta	960 sea	General.
Fiume	Austria	shipping, shipbuilding	cereals, tobacco, wood, fruit, flour	Fiume	florin	1200	Medit.
Flensburg	Germany	sugar refinery, tobacco, soap, foundry, distilleries, chandlery	transit	Flensburg	thaler	773	Baltic.
Florence	Italy	silk, fine arts, gold work	local	Leghorn	lira	1060	Medit.
Flushing	Belgium	shipping transit	transit entrepôt	Flushing, Antwerp	franc	180 sea	General.
Frankfurt	Germany	iron, textiles	cereals, pulse	Stettin	thaler	790	Baltic.
Frankfurt-sur-Maine	Germany	money, banking	wine, silk, wool, wood	Antwerp	thaler	682 *viâ* Paris	General.
Frederikshald	Norway	brandy, pottery	wood	Frederikshald	kroner	640 sea	Baltic.
Frederikshavn	Denmark	sea-faring	fish, provisions	Frederikshavn	kroner	584 sea	Baltic.
Frederikstadt	Norway	hardware, pottery, brandy, tiles	wood, provisions	Frederikstadt	kroner	632 sea	Baltic.
Galatz	Roumania	shipping	cereals, wood, entrepôt	Danube	piastre	3435 sea	Black Sea.
Gallipoli	Italy	oil, tunny fishing, textiles	oil, cotton	Gallipoli	lira	1519	Medit.
Gallipoli	Turkey, East	cotton, silk, fine morocco leather	corn, wine, oil	Gallipoli	lira	2960 sea	Black Sea.
Garrucha	Spain	mining	minerals	Garrucha	peseta	1539 sea	Medit.
Geestemunde	Germany	transit port for Bremen	transit port for Bremen	Bremen	thaler	637	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Gefle	Sweden	tobacco, sails, shipbldg	wood, fish, tar, pitch	Gefle	kroner	1242 sea	Baltic.
Genoa	Italy	velvet, silk, gold work	trade centre, entrepôt	Genoa	lira	894 2219 sea	Medit.
Ghent (Gand)	Belgium	cotton, textiles	corn, oil, wine, Flemish linen	Ostend	franc	196	General.
Gibraltar	Spain	shipping, shipbuilding	import coal station	Gibraltar	sterling real	1325 sea	Medit.
Gijon	Spain	cigars, fishing	coasting	Gijon	peseta	773 sea	General.
Girgenti	Sicily	agriculture, mining	minerals, sulphur, provisions	Girgenti	lira	2215 sea	Medit.
Giurgevo	Wallachia	grain entrepôt	cereals	Varna	piastre	1806	Black Sea.
Glogau	Germany	vinegar, beetroot sugar, dye mills, distilleries	shipping transit	Stettin	thaler	833	Baltic.
Gluckstadt	Germany	fishing, shipping	transit	Hamburg	thaler	700	General.
Gnesen	Germany	agriculture, brewing, cattle fairs	horses, cattle	Danzig	thaler	780	Baltic.
Gotha	Germany	porcelain, textiles	manufactures, produce	Hamburg	thaler	558	General.
Gothenburg	Sweden	fishing, textiles, tiles	wood, cereals	Gothenburg	kroner	609 sea	Baltic.
Gouda	Holland	bricks, agriculture	cheese, flax	Rotterdam	guilder	212 *viâ* R'dm direct	General.
Granada	Spain	coarse woollens	local manufactures	Malaga	peseta	1589	Medit.
Granville	France	fishing, shipbuilding	wine, brandy, produce, pitch	Granville	franc	248 direct	General.
Grasse	France	perfumery	local	Antibes, Marseilles	franc	948	Medit.
Gratz	Austria	textiles, ironware, leather	iron, wood, flax, hemp, seeds	Trieste	florin	1202	Medit.
Greiz	Germany	tannery, dye, mills	local	Bremen, Hamburg	thaler	721	General.

Grenoble	France	leather, gloves	iron, marble, liqueurs, wood	Marseilles	franc	697	Medit.
Gross-Wardein	Austria	earthenware	wine, agricultural produce, marble	Fiume, Danube	florin	1455	Intermed.
Gröningen	Holland	wool combing, dyeing, weaving	cereals	Harlingen, Delfzijl	guilder	362 direct	General.
Halle	Germany	salt, textiles, chemicals	salt, manufactures	Hamburg	thaler	738	General.
Hamar	Norway	wood, cereals	transit	Christiania	kroner	726	Baltic.
Hamburg	Germany	trade centre	trade centre	Hamburg	thaler	701	General.
Hamm	Germany	great railway centre, text	transit, cattle	Bremen	thaler	437	General.
Hanover	Germany	chocolate, chicry, hosiery, sugar, dye	transit wool, cereals, colonial produce	Bremen	thaler	588	General.
Haparanda	Sweden	fishing, woodwork	furs, fish, forest produce	Haparanda	kroner	1544 sea	Baltic.
Harburg	Germany	text, soap, starch, tobacco	transit with Hamburg	Hamburg	thaler	693	General.
Harlingen	Holland	shipping, shipbuilding, brewing	cereals, provisions, wood, transit	Harlingen	guilder	245 sea	General.
Havre	France	trade centre	trade centre	Havre	franc	197 direct	General.
Heilbron	Germany	cutlery, liqueurs, carpets	manufactures	Antwerp	thaler	645	General.
Helsingborg	Sweden	leather, dyeing, tile, salt	manufactures	Helsingborg	kroner	692 sea	Baltic.
Helsingfors	Russia, E.	linen, cordage, tobacco	cereals, wood, fish	Helsingfors	rouble	1249 sea	Baltic.
Hermanstadt	Transylvania	textiles, bone combs	e'ware, c'ware, tobacco pipes, gunpowder	Danube	florin	1681	Black Sea.
Hernosand	Sweden	building yards	wood, flax, pitch	Hernosand	kroner	1319 sea	Baltic.
Honfleur	France	lace, biscuits, rope, tan	eggs, produce, provisions	Honfleur	franc	200 direct	General.
Horsens	Denmark	tobacco, textiles	manufactures	Horsens	kroner	728 sea	Baltic.
Hudikswall	Sweden	snuff, tobacco	hemp, flax, wood, salt, fish	Hudikswall	kroner	1310 sea	Baltic.
Huelva	Spain	shipbuilding, mining, agriculture	minerals	Huelva	peseta	1588 1190 sea	General.
Hydra	Greece	silk, cotton, soap, leather	transit, Black Sea, Medit	Hydra	drachma	2665 sea	Medit.
Imst	Austria	agriculture	canaries largely	Trieste	florin	1175 *viâ* Verona	Medit.
Iserlohn	Germany	brass, copper, ironwork	manufactures, transit	Bremen, Antwerp	thaler	420	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Ismail	Turkey, E.	agriculture	cereals	Danube	piastre	3390 sea	Black Sea.
Iviza	Island	seafaring	salt	Iviza	real	1735 sea	Medit.
Jassy	Turkey	agriculture entrepôt	entrepôt	Odessa, Galatz	lira	1910	Black Sea.
Jonköping	Sweden	agr, ironwork, tobacco	transit mfc, agr produce	Gothenburg	kroner	694	Baltic.
Kasan	Russia	transit centre, russia lthr	entrepôt	Cronstadt	rouble	2265 *viâ* S. P'burg	Baltic.
Kemi	Russia	shipping, petroleum	produce	Kemi	rouble	2015 sea	White Sea.
Kertch	Russia, E.	shipping, fishing	cereals, stone, salt	Kertch	rouble	3510 sea	Black Sea.
Ketskemet	Hungary	agriculture, fairs	horses, cattle	Fiume	florin	1299	Medit.
Kiel	Germany	sugar, soap, textiles, iron foundry	transit	Kiel	thaler	733 793 sea	Baltic.
Königsberg	Germany	textiles, ironware, refinery, brewing, distil, shipbldg	rye, cereals, pulse	Königsberg	thaler	1112 990 sea	Baltic.
Kotka	Russia, E.	sawing mills	battens, deals	Kotka	rouble	1311 sea	Baltic.
Kramfors	Sweden	shipping	wood	Kramfors	kroner	1312 sea	Baltic.
Kustendjie	Turkey, E.	shipping transit centre	cereals	Kustendjie	lira	3290 sea	Black Sea.
La Hague	Holland	shipbuilding, distilleries	book mart	Amsterdam, La Hague, Rotterdam	guilder	214 direct	General.
La Rochelle	France	stoneware, glass	brandy, wine, provisions	La Rochelle	franc	572	General.
Landscrona	Sweden	shipbuilding, sugar, soap, tanning	corn, tar, wood, alum	Landscrona	kroner	705	Baltic.
Larissa	Turkey, E.	textiles, red dye	local	Volo	lira	2852 *viâ* Volo	Black Sea.
Laval	France	linen	manufactures, brandy, wine, iron	St. Malo, Caen	franc	470	General.
Lecco	Italy	wine, iron, copperware	silk, transit goods	Genoa	lira	897	Medit.
Leghorn (Livórno)	Italy	coral, straw bonnets, textiles	silk, straw, manufactures, transit	Leghorn	lira	1008 2170 sea	Medit.

Leipzig	Germany	books, wool sping, textiles	transit, fairs	Hamburg	thaler	725	General.
Lemberg	Austria	woollens, textiles, tobacco	extensive transit	Galatz, Odessa	florin	1603 *viâ* Vienna & Cracow	Black Sea.
Leyden	Holland	cloth factory	grain, cheese, manufactures, books	Rotterdam	guilder	224 direct	General.
Libau	Russia	agriculture	cereals, pulse, wood, provisions	Libau	rouble	1022 sea	Baltic.
Licata	Sicily	agriculture, mining	sulphur, wine, fruit	Licata	lira	2235 sea	Medit.
Lidköping	Sweden	earthenware, agriculture	manufactures, transit	Gothenburg	kroner	709 *viâ* Gothnbg	Baltic.
Liège	Belgium	iron centre (Birmingham of Belgium)	textiles, jewellery, soap	Antwerp, Ostend	franc	315	General.
Lille	France	fine linen thread, textiles	trade entrepôt	Dunkirk	franc	176	General.
Limoges	France	textiles, porcelain, books	entrepôt, Toulouse transit	Rochefort, Bordeaux	franc	533	General.
Lindau	Bavaria	surgical, musical instruments	transit	Genoa	florin	734 *viâ* Bale and S'hausen	Medit.
Linde	Sweden	earthenware, agriculture	manufacture, transit	Gothenburg	kroner	769	Baltic.
Linz	Austria	tobacco, textiles, leather	transit	Trieste	florin	843	Medit.
Linköping	Sweden	agriculture, textiles, tan	transit	Norköping	kroner	1107 *viâ* Norrkpg	Baltic.
Lipari	Sicily	agriculture, mining	minerals, produce	Lipari	lira	2340 sea	Medit.
Lisbon	Portugal	trade centre	trade centre	Lisbon	milreis	1596 1058 sea	General.
Ljusne	Sweden	sawmills	iron, wood	Ljusne, Soderhamn	kroner	1262 sea	Baltic.
Lodi	Italy	parmesan cheese, majolica ware	produce, manufactures	Genoa	lira	882	Medit.
Lodz	Russia, E.	woollens	manufactures	Danzig	rouble	1191	Baltic.
L'Orient	France	dockyards	produce	L'Orient	franc	626	General.
Louvain	Belgium	beer, textiles	transit	Antwerp	franc	259	General.
Louviers	France	broadcloth	cereals, flax, wool, charcoal, manufactures	Rouen	franc	184	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Lübeck	Germany	textiles, brewing, distilleries	cereals, quills, manufactures, transit	Lübeck	thaler	822 sea	Baltic.
Lucerne	Switzerlnd	trade centre, spinning	transit	Genoa	franc	658	Medit.
Lulea	Sweden	wood working, shipbldg	wood, shipping, transit	Lulea	kroner	1524 sea	Baltic.
Lucca	Italy	textiles, silk mills	manufactures, olive oil	Leghorn	lira	1011	Medit.
Lund	Sweden	woollens, tan, tobacco	local, educational	Malmö	kroner	731 *viâ* Malmö	Baltic.
Luneborg	Germany	centre bee culture	transit	Hamburg	thaler	598	General.
Lyons	France	silk, textiles, hats, books, jewellery	trade centre	Marseilles	franc	602	Medit.
Maastricht	Holland	tanning, sugar refin, text	transit	Antwerp	guilder	270	General.
Mâcon	France	text, clocks, copper fndry	minerals, cereals, shipwd	Marseilles	franc	558	Medit.
Madrid	Spain	tapestry, carpets, delft	trade centre	Bilbao	peseta	1184	General.
Malaga	Spain	iron, mining, agriculture	ore, minls, fruit, leeches	Malaga	peseta	1577	Medit.
Malmö	Sweden	gloves	crls, brandy, manufactures	Malmö	kroner	721 sea	Baltic.
Malta	Island	cotton, jewellery	coaling station	Valetta	scudi, sterling dollar	2315 sea	Medit.
Magdeburg	Germany	textiles, beet sugar, distil	transit, entrepôt	Hamburg	thaler	677	General.
Mannheim	Germany	carpets, text, agriculture	tobacco, produce	Antwerp	thaler	566	General.
Mantua	Italy	leather, textiles, soap, parchment	manufactures	Venice	lira	981	Medit.
Mariestadt	Sweden	agriculture	cereals	Gothenburg	kroner	710	Baltic.
Maria Theresienstadt	Hungary	textiles, dye-works	cattle, wool	Fiume, Danube	florin	1410 *viâ* Vienna	Intermed.
Marbella	Spain	esparto, leather, refining sugar, mining	ore, fruit, wine	Marbella	peseta	1365 sea	Medit.
Mariuple	Russia, E.	agriculture	cereals	Mariuple	rouble	3625 sea	Black Sea.
Marsala	Sicily	agr, "Marsala" wine	cereals, wine, fruit, oil, vanilla	Marsala	lira	2135 sea	Medit.

Marseilles	France	trade centre	trade centre	Marseilles	franc	819 2050 sea	Medit.
Mataro	Spain	text, brandy, esparto, cord	wine, fruit, manufactures	Mataro	peseta	1892	Medit.
Mayence (Maintz)	Germany	transit	transit entrepôt	Antwerp	thaler	517 *viâ* Cologne	General.
Mechlin	Belgium	lace, textiles	manufactures, transit	Antwerp	franc	246	General.
Meaux	France	centre cereals, text, flour	manufactures, produce	Havre	franc	308	General.
Meiningen	Germany	agriculture	produce, local	Bremen	thaler	798 *viâ* Cologne & Cassell	General.
Memel	Germany	wlns, cord, shipchandlery	wood, transit	Memel	thaler	1022 sea	Baltic.
Mende	France	important serge	manufactures, paper	Marseilles	franc	638	Medit.
Messina	Sicily	silk, shipping	fruit, wine, sulphur, trans	Messina	lira	2440 sea	Medit.
Metz	Germany	textiles, mills	wine, lthr, confectionery, transit	Antwerp	thaler	456	General.
Mezieres, Charleville	France	ironwork, arms, brass	transit produce	Calais	franc	267	General.
Milan	Italy	tobacco, textiles	transit	Genoa	lira	863	Medit.
Milazzo	Sicily	agriculture	wine, produce	Milazzo, Messina	lira	2395 sea	Medit.
Mohilev	Russia	tobacco manufactures	transit produce	Riga	rouble	2076	Baltic.
Mondovi	Italy	textiles, mills	cereals, wine, ship timber	Savona	lira	826	Medit.
Mons	Belgium	textiles, foundry	wood, coal, transit	Antwerp, Dunkirk	franc	213	General.
Montpelier	France	textiles, chemicals	transit	Cette, Marseilles	franc	805	Medit.
Montauban	France	textiles, mills	cereals, trade centre	Bordeaux, Cette	franc	717	Intermed.
Morlaix	France	linen, oil, candles, tobacco	manufactures, transit	Morlaix	franc	633	General.
Motril	Spain	agriculture, sugar, rum, trade centre	trade centre	Motril, Malaga	peseta	1430 sea	Medit.
Mortara	Italy	rice, cereals, silk	produce	Genoa	lira	852	Medit.
Moscow	Russia	centre	entrepôt	Cronstadt	rouble	2288	Baltic.
Moulins	France	silk, wine, cereals, cutlery	entrepôt emporium	Marseilles	franc	469	Medit.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Munich	Bavaria	beer, jewellery	manufactures, transit	Venice	florin	867 *viâ* Paris & Strasburg	Medit.
Namur	Belgium	cutlery	transit	Antwerp	franc	312 *viâ* Brussels	General.
Nancy	France	textiles, mills	manufactures, local	St. Valery, Antwerp	franc	468	General.
Nantes	France	textiles, chemicals, mills	wine, transit	Nantes	franc	548	General.
Naples	Italy	silk, textiles	maccaroni, rags, produce, transit	Naples	lira	1431 *viâ* Turin & Florence	Medit.
Narva	Russia	nails	wood, hemp, flax	Narva	rouble	1338 sea	Baltic.
Naumburg	Germany	perfumery, millinery	textiles, mfc, feathers	Hamburg	thaler	662	General.
Nauplia	Greece	agriculture	fruit, produce	Nauplia	drchma	2610 sea	Medit.
Navarino	Greece	agriculture	fruit	Navarino	drchma	2623 sea	Medit.
Neder Calix	Sweden	sawmills	wood	Neder Calix	kroner	1544 sea	Baltic.
Neufchateau	France	ironwork, textiles	nails, iron, textiles	Calais	franc	396	General.
Neufchatel	Switzerland	centre watch making	entrepôt	Marseilles	franc	569	Medit.
Neusatz	Hungary	entrepôt	transit	Fiume, Danube	florin	1424 *viâ* Szegedin	Intermed.
Nevers	France	textiles, ironworks	manufactures	Nantes, Marseilles	franc	426	Intermed.
Nice	France	textiles, agriculture, mills	oil, wine, silk, essences	Nice	franc	959	Medit.
Nicolaieff	Russia, E.	shipbuilding, agriculture	cereals	Nicolaieff	rouble	3450 sea	Black Sea.
Nieuport	Belgium	distil, cord, tobac, shpbldg	transit, manufactures	Nieuport	franc	149	General.
Nijnii Novgorod	Russia	cloth, cord, leather	cereals	Cronstadt	rouble	2562 *viâ* Moscow	Baltic.
Nîmes	France	textiles, fancy-ware	entrepôt transit	Marseilles	franc	772	Medit.

Niort	France	gloves, textiles, leather	mfc, agr, produce, claret	Rochefort	franc	530	General.
Nordhausen	Germany	textiles, chemicals	cereals, cattle	Bremen, Hamburg	thaler	843 *viâ* Erfurt & Cassell	General.
Nontron	France	cutlery, tanning	cattle, iron	Bordeaux	franc	589	General.
Norköping	Sweden	rfnry, shipbuilding, shipping	textiles, soap, tobacco, oil	Norköping	kroner	1087 sea	Baltic.
Novara	Italy	textiles, confectionery	cereals, rice	Genoa	lira	834	Medit.
Nuremburg	Bavaria	wire	manufactures, transit	Trieste	florin	860 *viâ* Paris & Frnkfrt	Medit.
Nyborg	Denmark	shipbuilding, agriculture	cereals	Nyborg	kroner	736 sea	Baltic.
Nyhamn	Sweden	shipping, seafaring	ship prvs, cereals, wood	Nyhamn	kroner	1236	Baltic.
Odense	Denmark	cloth, iron founding	transit, manufactures	Odense, Nyborg	kroner	756 *viâ* Nyborg	Baltic.
Odessa	Russia	shippg, agriculture, trans	crls, sgr, entrepôt, tallow	Odessa	rouble	3410	Black Sea.
Oedenburg	Hungary	textiles	tobacco, prvs, textiles	Trieste	florin	1112	Medit.
Offenbach	Germany	textiles, fancy ware	wine, manufactures, trans	Antwerp	thaler	734 *viâ* Paris & Frnkfrt	General.
Oldenburg	Germany	refineries, distilleries	wood, wool, cattle	Bremen	thaler	591 *viâ* Osnabruck	General.
Onega	Russia	agriculture, seafaring	wood, fish	Archangel, Onega	rouble	2069	White Sea.
Oporto	Portugal	text, potteries, dockyards	wine, fruits	Oporto	milreis	860 sea	General.
Orange	France	textiles, silk, madder mills	wine, oil, cereals, madder	Marseilles	franc	727	Medit.
Orebro	Sweden	textiles, tobacco, paper	transit, manufactures	Gothenburg	kroner	749	Baltic.
Orel	Russia	mills, tanneries	trade centre	Riga, Odessa	rouble	2250 *viâ* Smlnsk	Intermed.
Orenburg	Russia	trade centre, shawls, text	caravan transit centre	Azov	rouble	3162	Black Sea.
Oristano	Sardinia	fishing, ironware	cereals, wine, oil	Oristano	lire	2073 sea	Medit.
Orleans	France	text, refinery, tan, mills	produce, manufactures	Rouen, Nantes	franc	358	General.
Oscarhamn	Sweden	agriculture, shipping	sea shipping	Oscarhamn	kroner	808 sea	Baltic.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Ostend	Belgium	transit, shipping, fishing	transit, oysters, rabbits	Ostend	franc	145 d'rct	General.
Ostersund	Sweden	sawing, woodwork	transit, produce	Sundswall	kroner	1409	Baltic.
Paimboeuf	France	shipping, marine stores	transit for Nantes	Nantes	franc	578	General.
Palermo	Sicily	textiles, fishing, mining	sulphur, wine, frt, prodc	Palermo	lira	2282 sea	Medit.
Palma	Spain	text, brandy, oil, flr mills	fruit, wines	Palma	peseta	1805 sea	Medit.
Palomares	Spain	woollens, dye, mining	ore, cereals, cheese.	Palomares	peseta	1558 sea	Medit.
Pampeluna	Spain	linens	manufactures, local	Bilbao, Bayonne	peseta	872	General.
Paris	France	trade centre	trade centre	Rouen	franc	283	General.
Parma	Italy	textiles, agr, fancy ware	crls, silk, wine, confect	Genoa, Ancona	lira	923	Medit.
Pasages	Spain	agriculture, mining	wine, ore, transit	Pasages	peseta	800 sea	General.
Patras	Greece	capotes, agriculture	currants, silk, cotton, wl, hides, oil	Patras	drachma	2635 sea	Medit.
Pau	France	table linen	wine, chestnuts, produce	Bayonne, Bordeaux	franc	780	General.
Perigeux	France	text, cutlery, distil, tan	produce, mfc, patés	Bordeaux	franc	579	General.
Perm	Russia	c′, i′, smelting, refining	manufactures	Cronstadt, Archangel	rouble	3150 *viâ* Mosc. & Jaroslaw	Intermed.
Pernau	Russia	agriculture, shipping	flax, pulse, cereals, leather	Pernau	rouble	1179 sea	Baltic.
Pesth	Hungary	text, fancy ware, beet sgr	trade centre	Danube	florin	1234	Black Sea.
Philippopolis	Turkey, E.	silk cloth	transit, manufactures	Bourgas, Salonica	lira	3399 by sea to C'nople	Black Sea.
Piacenza	Italy	text, i′ ware, paper mills	cereals, cattle	Genoa	lira	887	Medit.
Pillau	Germany	fishing, shipping, agr	wood, flax, cereals	Pillau	thaler	991 sea	Baltic.
Piræus	Greece	shipping, transit	entrepôt for Athens	Piræus	drachma	2710 sea	Medit.
Pisa	Italy	textiles, white lead, vitriol, glass	cereals, oil, fuel	Leghorn	lira	998	Medit.

Pitea	Sweden	wood, timber working	shipping wood	Pitea	kroner	1505 sea	Baltic.
Poitiers	France	textiles, cards, vinegar	agricultural produce	La Rochelle	franc	489	General.
Port Mahon	Minorca	fishing, agriculture	cereals, honey, fruits	Mahon	real	1860 sea	Medit.
Posen	Germany	textiles	transit, manufactures	Stettin	thaler	916	Baltic.
Poti	Russia	shipping, agriculture	wine, silk, skins, oil	Poti	rouble	3670 sea	Black Sea.
Potsdam	Germany	textiles, chemicals	local	Stettin	thaler	744	Baltic.
Prague	Bohemia	trade centre	trade centre	Hamburg, Stettin	florin	1030 *viâ* N'mberg	Intermed.
Presburg	Hungary	textiles, tobacco	transit, manufactures	Trieste, Danube	florin	1104	Intermed.
Previsa	Turkey	agriculture, shipping	valonea, cereals	Previsa	lira	2580 sea	Medit.
Pyrgos	Greece	agriculture, shipping	fruits, produce	Pyrgos	drachma	2643	Medit.
Quimper	France	pilchard fishing, pottery	transit	Quimper	franc	667 *viâ* Paris	General.
Raab	Hungary	cutlery, tobacco	transit	Fiume	florin	1125	Medit.
Ragusa	Austria	morocco leather, textiles	transit with Levant	Ragusa, Cattaro	florin	2745 sea	Medit.
Reggio	Italy	textiles, pottery, gloves, stockings, perfumes	oil, silk	Leghorn	lira	1754	Medit.
Reichenberg	Bohemia	textiles	local	Venice	florin	811 *viâ* Dresden	Medit
Rennes	France	marine stores, agriculture	agricultural produce	St. Malo	franc	515	General.
Reval	Russia	agriculture, shipping	flax, hemp, cereals, wood	Reval	rouble	1233 sea	Baltic.
Rheims	France	textiles, dye works	wine, agricultural produce	Abbeville	franc	382	General.
Riga	Russia	trade centre	wood, cereals, pulse	Riga	rouble	1182 sea	Baltic.
Roanne	France	textiles, mills	entrepôt transit	Marseilles	franc	529	Medit.
Rochefort	France	refinery, shipbuilding	brandy	Rochefort	franc	576	General.
Rodosto	Turkey, E.	agriculture, shipping	cereals, wine	Rodosto	lira	3030 sea	Medit.
Romans	France	agriculture (specially mulberry)	agricultural produce, textiles	Marseilles	franc	680	Medit.
Rome	Italy	local	local	C. Vecchia	lira	1193 *viâ* Genoa	Medit.
Rostock	Germany	tobac, cord, soap, chmcl	cereals, wool, flax, provs	Rostock	thaler	813 sea	Baltic.
Rotterdam	Holland	trade centre	trade centre	Rotterdam	guilder	200 d'rct	General.
Roubaix	France	table linen	cereals, wine, produce	Calais, Os'd	franc	169	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Rouen	France	cotton centre	trade centre	Rouen, Havre	franc	154	General.
Rovigno	Austria	fishing	fish	Rovigno	florin	1211 *viâ* Turin & Venice	Medit.
Rustchuk	Bulgaria	textiles, weaving	transit	Danube, Varna	piastre	1806	Black Sea.
Sables d'Olonne	France	fishing, shipping	fish, transit	Sables d'Olonne	franc	578	General.
St. Brieuc	France	paper, serge, textiles, shipping	ship transit	St. Brieuc	franc	584 *viâ* Paris	General.
St. Etienne	France	hardware centre, cutlery, ribbon steel, flo silks	coal, manufactures	Marseilles	franc	632	Medit.
St. Malo	France	marine stores, shipping	produce	St. Malo	franc	556	General.
St. Nazaire	France	shipping	transit, shipping	St. Nazaire	franc	594	General.
St. Petersburg	Russia	trade centre through Cronstadt	trade centre through Cronstadt	Cronstadt	rouble	1731 *viâ* Berlin & Könsbg.	Baltic.
St. Quentin	France	textiles, tissues, agriculture	agr prodc, liquorice	Calais	franc	204	General.
St. Ubes	Portugal	salt, shipping	salt, fruit, wine, cereals	Setubal	milreis	1088 sea	General.
St. Valery	France	marine stores, fishing	wine, produce	St. Valery, Abbeville	franc	167 *viâ* Dieppe	General.
Salonica	Turkey, E.	agriculture	cereals, cotton, wool, tobacco, wood	Salonica	lira	2930 sea	Black Sea.
Salerno	Italy	agriculture, shipping, rice	oil, wine, fruit	Salerno	lira	1466 by Florence	Medit.
Saluzzo	Italy	ironware, vertu	wine, cereals, cattle	Savona	lira	809	Medit.
Samos	Cephal'nia	pottery, wine, agriculture	cereals, fruit, wine	Samos	drachma	2580 sea	Medit.
San Sebastian	Spain	cord, agriculture, mining	colonial produce, salt fish	San Sebastn, Bayonne	peseta	928	General.

Santander	Spain	cigars, mining, sugar refinery	iron ore, provisions	Santander	peseta	810 sea	General.
Santiago	Spain	agriculture, onions, lthr, silver ware	produce	Coruña	peseta	875	General.
Santorin	Island	agriculture	wine, fruit	Santorin	drachma	2620 sea	Medit.
Saragossa	Spain	flour, agriculture	chocolate, paper, wool, cast iron	Bilbao, Tarragona	peseta	972	Intermed.
Saratov	Russia	agriculture, cordage	transit between Astracan and Moscow	Azov	rouble	2548	Black Sea.
Savona	Italy	agriculture, shipping	silk, wool, fruit	Savona	lira	867	Medit.
Schemnitz	Austria	centre silver mining	minerals	Trieste	florin	1303	Medit.
Schiedam	Holland	gin, copper and iron castings	gin, coals, cereals	Rotterdam	guilder	203 direct	General.
Schwerin	Germany	textiles, brandy, mills	transit, local	Wismar, Lubeck	thaler	740	Baltic.
Sedan	France	broad cloth, woollens	cereals, cattle, hemp	Antwerp, Ostend	franc	344 *viâ* Brussels	General.
Seidlitz	Austria	seidlitz powders	manufactures	Trieste	florin	915	Medit.
Semlin	Hungary	entrepôt	transit entrepôt	Danube	florin	1514 *viâ* Basiasch	Black Sea.
Sérès	Turkey, E.	textiles, cotton, tobacco	coals, fruit	Salonica	lira	2975 *viâ* Salonica	Black Sea.
Setubal	Portugal	salt, mining	salt, fruit, wine, cereals	Setubal	milreis	1088 sea	General.
Sevastopol	Russia, E.	shipping, agriculture	cereals, tallow, wool	Sevastopol	rouble	3360 sea	Black Sea.
Seville	Spain	tobacco, textiles, mining	lead, copper, fruit	Seville, Huelva	peseta	1540	General.
Sevres	France	porcelain	transit manufactures	Rouen	franc	294	General.
Siena	Italy	textiles, leather	cereals, marble	Leghorn	lira	1110 by Florence	Medit.
Skelleftea	Sweden	wood, timber working	wood, timber	Skelleftea	kroner	1455 sea	Baltic.
Soderhamn	Sweden	sawmills, linen	wood	Soderhamn	kroner	1262 sea	Baltic.
Soller	Spain	linen, cotton thread	fruit, linen	Soller, Palma	peseta	1810	Medit.
Soria	Spain	agriculture, butter cakes	fruit, sheep, wool, wood	Bilbao	peseta	974 *viâ* Pampeluna	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Sorrento	Italy	silk	wine, silk	Sorrento	lira	1456	Medit.
Spalatro	Austria	candles, brandy	transit provisions	Spalatro	florin	2860 sea	Medit.
Spezzia	Italy	shipping, agriculture	marble, fruit	Spezzia	lira	946	Medit.
Stavanger	Norway	distil, shipbuildg, fishing	herrings, lobsters, fish	Stavanger	kroner	516 sea	Norwegian, Baltic.
Stettin	Germany	sugar refinery, textiles, brewing, vinegar	cereals, wood, transit	Stettin	thaler	829 *viâ* Berlin.	Baltic.
Steyer	Austria	cutlery	manufactures	Trieste	florin	1207	Medit.
Stockholm	Sweden	entrepôt	trade centre	Stockholm	kroner	1127 sea	Baltic.
Stralsund	Germany	textiles, soap, distilleries, shipyards	transit	Stralsund	thaler	786 sea	Baltic.
Stuttgart	Germany	printing, book trade	manufactures, local trans	Antwerp	thaler	708 *viâ* Paris & Strasbg	General.
Sulina	Russia	entrepôt	cereals	Danube	piastre	3340 sea	Black Sea.
Sundswall	Sweden	sawmills, shipping	wood, tar	Sundwall	kroner	1309 sea	Baltic.
Svendborg	Denmark	tanning, shipbuilding	local, transit	Svendborg	kroner	738 sea	Baltic.
Swinemünde	Germany	transit for Stettin	transit for Stettin	Stettin Sw'münde	thaler	841 sea	Baltic.
Syra	Greece	agriculture, shipping	cereals, fruit	Syra	drachma	2795 sea	Medit.
Syracuse	Sicily	agriculture	fruit, cereals, saltpetre	Syracuse	lira	2358 sea	Medit.
Szegedin	Hungary	cloth, tobacco	tobacco, salt, wool, cereals, cattle, cotton	Fiume, Danube	florin	1421	Intermed.
Taganrog	Russia	earthenware, cord, shipg	crls, prod, talw, hides	Taganrog	rouble	3680	Black Sea.
Taranto	Italy	textiles, gloves, dye	local manufactures	Taranto	lira	1385	Medit.
Tarbes	France	horse fair, leather mfc	produce, manufactures	Bordeaux	franc	733	General
Tarifa	Spain	agr, oranges, vermicelli	shipping, transit, produce	Tarifa	peseta	1310 sea	Medit.
Tarragona	Spain	entrepôt	trade centre, wine, fruit	Tarragona	peseta	1840 sea	Medit.
Temesvar	Hungary	silk mills, textiles, wine, tobacco, oil	cereals, manufactures, transit	Danube	florin	1422	Black Sea.

Termini	Sicily	agriculture	cereals, oil, olives	Termini	lira	2290 sea	Medit.
Terneusen	Holland	smelting, shipping	transit, ore import	Terneusen Antwerp	guilder	166 sea	General.
Theodosia	Russia	agriculture	cereals	Kaffa	rouble	3430	Black Sea.
Thiers	France	centre cutlery, textiles	manufactures, earthenware.	Marseilles	franc	520	Medit.
Thorn	Germany	textiles, gingerbread, shipping	cereals, wood, ashes, and minor Baltic freight	Dantzic	thaler	972	Baltic.
Tiflis	Russia	carpets, silks, shawls, prints, calicos	trade entrepôt	Batoum	rouble	3850	Black Sea.
Tilsit	Germany	linen, waggons, sugar refinery	crls, linseed, wax, wood	Memel	thaler	1285	Baltic.
Tokay	Austria	centre wine	wine emporium	Trieste	florin	1305	Medit.
Toledo	Spain	swords, church robes, textiles, mills, dye mills	manufactures, confectionery	Alicante Valencia	peseta	1236	Medit.
Tonning	Germany	shipping	cattle, transit	Tonning	thaler	420 sea	General.
Tornea	Russia	fishing, sawing	wood, skins, fish	Tornea	rouble	1540 sea	Baltic.
Torrevieja	Spain	flour, looms, mining	salt	T'vieja	peseta	1590 sea	Medit.
Toulon	France	textiles, confectionery, shipbuilding	cereals, wine, brandy, produce	Toulon Marseilles	franc	861	Medit.
Toulouse	France	tanning, textiles, "paté-de-foies gras"	produce, leather, transit	Bordeaux Cette	franc	479	Intermed.
Tourcoing	Belgium	linen	manufactures, carpets	Ostend	franc	171	General.
Tournay	Belgium	carpets, porcelain, textiles	transit entrepôt	Calais	franc	186	General.
Tours	France	textiles, starch, candles	prodc, mfc, trans	Nantes	franc	428	General.
Trapani	Sicily	shell work, coral, mining	soda, salt	Trapani	lira	2137 sea	Medit.
Travemunde	Germany	transit for Lübeck	transit for Lübeck	Lübeck	thaler	818 sea	Baltic.
Trieste	Austria	white lead, candles	produce, cereals, wood, produce	Trieste	florin	2984 sea 1502 *viâ* Vienna 1137 *viâ* Turin & Venice	Medit.
Tromsoe	Norway	shipping, fishg, seafaring	fishing, furs	Tromsoe	kroner	1470 sea	Norwegian.
Trouville	France	agriculture, shipg, local	local	Trouville	franc	209	General.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Troyes	France	centre cotton mfc	manufactures, trans prodc	Havre	franc	387	General.
Tula	Russia	iron centre	emporium	Riga	rouble	2314	Baltic.
Tulle	France	silk, firearms, leather	wines, manufactures	Bordeaux	franc	590	General.
Tultcha	Roumania	shipping, agriculture	cereals	Danube	piastre	3380 sea	Black Sea.
Turin	Italy	silk	manufactures, produce	Savona	lira	770	Medit.
Uddewalla	Sweden	textiles, tobac, refin sugar	cereals, wood, iron	Uddewalla	kroner	646	Baltic.
Uleăborg	Russia	fishing, sawing	wood, fish	Uleăborg	rouble	1500 sea	Baltic.
Ulm	Würtemburg	textiles, matches, tobacco, brick works	cereals, wood, wine, seeds, manufactures	Venice, Trieste	florin	767 *viâ* Paris & Strasburg	Medit.
Umeă	Sweden	sawing, agriculture	wood, iron, pitch	Umeă	kroner	1399 sea	Baltic.
Upsala	Sweden	mining, agriculture	minerals	Stockholm	kroner	1167 *viâ* Stokhlm	Baltic.
Uskup	Turkey, E.	agriculture	local	Salonica	lira	3045 *viâ* Salonica	Medit.
Utrecht	Holland	textiles, shipping	cereals, cattle, mfc	Amsterdam	guilder	453	General.
Valence	France	textiles, gloves	wine, produce, mfc	Marseilles	franc	667	Medit.
Valencia	Spain	silk spinning, weaving	cereals, mfc, silk, saffron, fruit, wine	Valencia	peseta	1740 sea	Medit.
Valenciennes	France	lace, textiles, pottery	trade centre	Calais	franc	198	General.
Valladolid	Spain	paper, textiles	entrepôt	Santander	peseta	1004	General.
Varna	Turkey, E.	agriculture, shipping	cereals	Varna	lira	3240 sea	Baltic.
Venice	Italy	glass, textiles	wood, glass, coral, mfc	Venice	lira	1029	Medit.
Verneuil	France	agriculture, textiles	textiles, leather, produce	Havre	franc	296	General.
Verviers	Belgium	centre woollens	trade centre	Antwerp	franc	283	General.
Vianna	Portugal	agriculture	produce	Vianna, Oporto	milreis	845 sea	General.
Viatka	Russia	soap, leather, distilleries	cereals, manufactures, transit	Archangel, Cronstadt	rouble	2870	Intermed.

Vichy	France	mineral waters	produce, manufactures	Marseilles	franc	499	Medit.
Vienna	Austria	shawls, textiles	entrepôt	Trieste, Danube	florin	1132 *viâ* Orient	Intermed.
Vigo	Spain	agriculture, fishing	wine, cereals, sardines	Vigo	peseta	810 sea	General.
Vilna	Russia	agriculture	transit	Libau	rouble	1392	Baltic.
Vologda	Russia	textiles, cord, vertu, tan	entrepôt	Cronstadt	rouble	2578	Baltic.
Volo	Greece	agriculture, shipping	crls, cord, silk, tobac, ctn	Volo	drachma	2810 sea	Black Sea.
Vonitza	Greece	agriculture	olive oil, cereals	Vonitza	drachma	2605 sea	Medit.
Warsaw	Poland	trade centre	trade centre	Dantzic	rouble	1480	Baltic.
Wenersborg	Sweden	mining, agriculture	cereals, timber, iron	Uddewalla	kroner	646	Baltic.
Westeras	Sweden	mining, agriculture	iron, produce	Stockholm	kroner	1187	Baltic.
Westphalia	District	centre hams	general	Bremen	thaler	443 to Munster	General.
Weimar	Germany	local	local	Bremen, Hamburg	thaler	806 *viâ* Cassell	General.
Wexio	Sweden	agr, paper, text, carpets	manufactures, transit	Malmö	kroner	841	Baltic.
Wieliczka	Austria	salt, mining	salt	Stettin	florin	1399	Baltic.
Windau	Russia	shipping, agriculture	flax, cereals, pulse	Windau	rouble	1062 sea	Baltic.
Wismar	Germany	transit, agriculture	butter, cereals	Wismar, Lubeck	thaler	819 sea	Baltic.
Wurtemburg	District	centre wine, hock	cereals, produce, wine	Trieste	florin	632	Medit.
Wyburg	Russia	sawing, shipping, transit	wood, tar, tallow	Wyburg	rouble	1363 sea	Baltic.
Ypres	Belgium	textiles, diaper, tobacco	manufactures, prodc, local	Calais	franc	163	General.
Ystad	Sweden	textiles, soap, chicory, feathers, dye works	transit, manufactures	Ystad	kroner	732 sea	Baltic.
Zante	Ionian I.	agriculture	currants	Zante	drachma	2634 sea	Medit.
Zara	Austria	rosoglio, agriculture	provisions	Zara	florin	2880 sea	Medit.
Zea	Island	tanning, silkworm rearing	cereals, cattle, fruit	Zea	drachma	2695 sea	Medit.
Zombor	Hungary	agriculture, transit	cattle, corn	Danube	florin	1412	Black Sea.
Zurich	Switzerland	textiles, dye, tobacco	transit manufactures	Genoa	franc	652	Medit.
Zwölle	Holland	marine stores, dye, soap, vinegar, chandlery	trade entrepôt	Amsterdam	guilder	271 *viâ* Rot'dam direct	General.

EXTRA-EUROPEAN.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Abancay	Peru	sugar works, refnry, agr	sugar, hemp, produce	Port St. Nicholas	dollar	9720	W. Coast.
Abha	Abyssinia	transit	cattle, iron, skins, cotton	Massowah	dollar	4490	Red Sea.
Abomey	Africa	slave traffic, transit	palm oil, ivory	Whydah	dollar	4150	W. Coast Africa.
Abukir	Egypt	shipping, agriculture	cereals	Abukir	piastre	3112	Medit.
Acapulco	Mexico	agriculture, mining, trans	cochineal, indigo, skins, silver	Acapulco	dollar	12,070	Mexican.
Accra	Ashantee	gold working, agriculture	gold, ivory, palm oil, coffee, ground nuts	Accra	sterling	3940	W. C. Afrc.
Acheen	Sumatra	agriculture	precious stones, gold, camphor, sulphur	Acheen	franc	7700 11,065	Strts & E. I.
Acre	Syria	agriculture	cereals, cotton	Acre	piastre	3515	Levant.
Adalia	Turkey, A.	agriculture	fruits	Adalia	piastre	3200	Levant.
Adelaide	S. Astrlia	commercial and centre	trade centre	Adelaide	sterling	8745	Colonial.
Aden	Arabia	shipping, coal station	ivory, coffee	Aden	rupees	4695	Red Sea.
						9950	
Adowa	Abyssinia	textiles, iron, brass	minerals, carpets, shawls, skins, ivory	Massowah	dollar	4450	Red Sea.
Agra	Hindostn	agriculture	indigo, silk, sugar	Bombay	rupee	7355	Indian.
Ahguay	Guinea	cotton, spinning, weaving	slave trade	Ahguay	dollar milrei	4041	W. C. Afrc.
Ain-Tab	Syria	leather, calico	cotton, wool, bees' wax	Alexandrtta	piastre	3612	Levant.
Akyab	Burmah	shipping, agriculture	rice, wood, tobacco	Akyab	rupee	7950	Indian.
						11,440	

Albany	U. States	carriages, hats, caps, leather, ironwork	lumber market, extensive transit	New York	dollar	3370	States.
Albany	W. Astrlia	hats, tan, soapwrks, tiles	wool	Albany	sterling	7700	Colonial.
Aleppo	Syria	fl silks, fl cottons	silk, wool	Alexandrtta	piastre	3595	Levant.
Alexandretta	Syria	entrepôt, shipping	silk, cotton, beshmet	Alexandrtta	piastre	3530	Levant.
Alexandria	Egypt	shipping, trans, entrepôt, trade centre	cotton, cotton seed, sugar, cereals	Alexandria	piastre, sterling	3102	Medit.
Algiers	Algeria	shipg, agriculture, trade centre	cereals, transit	Algiers	franc	1740	Medit.
Algoa Bay	S. Africa	shipping	wool, skins, hair, horns, ivory, feathers	Algoa Bay	sterling	6340	Cape.
Allahabad	Hindostn	agriculture	local, transit	Calcutta	rupee	6460	Indian.
Amboina	Moluccas	cloves, agriculture	spice, ebony, sago, coffee	Amboyna	florin	10,200	E. Indian.
Ambrizette	Africa	agriculture	ground nuts, ivory	Ambrizette	dollar, milrei	4850	W. C. Africa.
Amherst	U. States	machinery, tools, cotton goods, paper	transit, timber	Amherst	dollar	2770	States.
Amoy	China	entrepôt	camphor, sugar candy, paper	Amoy	tael	10,015 14,185	China.
Angora	Turkey, A.	agriculture	goats' wool, merino twists, madder	Sinope	piastre	3290	Levant.
Anjer	Sumatra	agriculture, shipping	sugar, rice, coffee, spice	Anjer	florin	8270 11,155	E. Indian.
Annapolis	N. Scotia	herring fishing, shpbldg	transit	Annapolis	dollar	2915	Canadian.
Antigua	Island	agriculture, shipping	sugar, rum, molasses, pine apples	Antigua	dollar sterling	3830	W. Indian.
Antofagasta	Chili	shipping, mining	nitrate, silver ore	Antofagasta	dollar	9390	W. Coast.
Apalachicola	U. States	shipping	hewn, sawn timber	Apalachicola	dollar	4390	States.
Aracaju	Brazil	planters	sugar, cotton	Aracaju	milrei	4080	S. Amercn.
Arzew	Algeria	esparto	cereals, salt, oil	Arzew	franc	1560	Medit.
Ascension	Island	shipping station, turtle	provisions	Ascension	sterling	3905	Island.
Aspinwall	Columbia	transit, entrepôt	nuts, indiarubber, hides	Aspinwall	dollar	4998	Mexican.
Assam	India	silk, pottery, coppersmiths	tea, silk, betel nut, caoutchouc	Chittagong	rupee	8300	Indian.
Astoria	Oregon	agriculture	cereals	Astoria	dollar	14,285	States.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Asuncion	S. America	agriculture, honey, wax, tobacco	maté, tobacco, hides, sugar, wood	Asuncion	dollar	6950	S. Amercn.
Auckland	N. Zealand	entrepôt	gold, wood, gum, flax, wool, oil, hides, tallow	Auckland	sterling	12,120	Colonial.
Augusta	U. States (Savannah)	extensive emporium	trade centre	Charleston	dollar	3820 *viâ* C'ton	States.
Axim	Africa	agriculture	palm oil, kernels	Axim	dollar	3800	W.C. Afric.
Aymaun	Arabia	pearl fishery	pearls	Aymaun	piastre	6100	Pers. Gulf.
Azerbijan district	Persia	textiles, velvets, tan, mining	cereals, tobacco, cotton, cutlery, all produce	Bussorah	para, piastre	7200	Pers. Gulf.
Azores	Island	agriculture, shipping, coal station	wine, brandy, orange, lemon	Ponte Delgada	reis	1460	Island.
Bagdad	Turkey, A.	leather, plush	specie, tombak, galls, shawls, myrrh, indigo	Bussorah	piastre	6950	Pers. Gulf.
Bahama	Island	agriculture, shipping	cotton, turtles	Gt. Bahama	dollar	3850	Island.
Bahia	Brazil	whale fishery, entrepôt	sugar, cotton, rum, tobacco, rice, specie	Bahia	milrei	4505	S. Amercn.
Balkh	Afghanistan	agricultural depôt	caravan centre	Kurrachee	rupee, kran	7500 *viâ* Peshwur	Indian.
Baltimore	U. States	trade, shipping, centre	crls, trade centre, transit	Baltimore	dollar	3578	States.
Banana	Africa	factories	ivory, palm oil, nuts	Banana	sterling	4800	W.C. Afric.
Banda	Moluccas	agriculture	nutmeg, mace	Banda, I.	florin	10,200	E. Indian.
Bangkok	Siam	cotton mfc, agriculture	rice, sgr, teak, aromatic wood	Bangkok	dollar	9320	Straits and E. Indian.
Bangor	U. States (Maine)	lumber depôt	lumber transit	Boston Bangor	dollar	3230 *viâ* Boston	States.
Barbadoes	Island	planters	sugar, molasses	Bridgetown	dollar	3805	W. Indian.
Barcelona	Venezuela	agriculture	cutlery	Barcelona	dollar	4135	S. Americn.
Bareilly	Hindostan	important text, ctly, &c.	manufactures, brass-work, trade centre	Bombay	rupee	7485	Indian.

Baroda	Hindostan	cotton growing	sugar, tobacco, produce	Surat	rupee	6430	Indian.
Bassein	Hindostan	entrepôt	rice, teak	Bassein	rupee	7995	Indian.
Batavia	Java	entrepôt, shipping	sugar, rice, coffee, spice, tea	Batavia	dollar	8330 11,270	E. Indian.
Bathurst	Africa	commercial	gum, wax, ivory, rice, cotton, teak	Bathurst	sterling	2680	W. C. Afrc.
Bathurst	N. Brunswick	maple sugar, produce	deals, timber, fish	Bathurst	dollar	2670	Canadian.
Bathurst	N.S.W'les	centre gold fields	specie, produce	Sydney	sterling	10,950	Colonial.
Beaufort	U. States	shipping	cotton, timber	Beaufort	dollar	3735	States.
Belize	Honduras	shipping, transit	mahogany	Belize	dollar	4570	Mexican.
Bengazi	Tripoli	shipping, transit	cattle, cereals, wool	Bengazi	piastre	2650	Medit.
Benguela	Africa	transit	ivory, wax, gum, copal, urzella	Benguela	reis, sterling	5010	W. C. Afrc.
Benin	Africa	agriculture	cattle, fruits, provisions	Benin	dollar,stg	4280	W. C. Afrc.
Benisaf	Algeria	mining	iron ore	Benisaf	franc	1560	Medit.
Berbice	Guiana B.	planters	sugar, coffee, rum, molss, hardwood, cotton	Berbice	dollar	4040	S. Amercn.
Bermuda	Islands	shipbuilding, agriculture	arrowroot, potatoes, onions	St. George	sterling, dollar	3055	W. Indian.
Beyrout	Syria	silk, cotton	tobacco, gall nuts, madder, oil	Beyrout	piastre	3530	Levant.
Bimlipatam	Hindostan	transit	jaggery, seeds, horns, hide, jute, cotton	Bimlipatam	rupee	7720	Indian.
Black River	Jamaica	see under	Jamaica	Black River	sterling	4157	W. Indian.
Bloemfontein	C. Colony	wool centre	produce	Port Natal	sterling	7110	Cape.
Bluff	New Zealand	transit for	Invercargill	Campbelltown	sterling	12,150	Colonial.
Bogota	Granada	soap, cloth, leather, metal	active transit	Cartagena	dollar	5400	S. Amercn.
Bokhara	Tartary	trade centre	caravan depôt	Kurrachee	kran	7760 *viâ* Peshwur	Cent. Asia.
Bombay	India	trade centre	trade centre	Bombay	rupee	6330 10,590	Indian.
Bona	Algeria	burnooses, tapestry, mining	cereals, wool, wax, hides, coral	Bona	franc	1965	Medit.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Bonny	Africa	slave trade, commerce	palm oil, ivory	Bonny	dollar, sterling	4170	West Coast African.
Borneo	Island	agriculture, shipping	gold, diamonds, camphor, ebony, cassia, sago, rice	Sarawak	dollar	8550	E. Indian.
Boston	U. States	trade centre	entrepôt, trade centre	Boston	dollar	3030	States.
Bougiah	Algeria	wax candles, agriculture	oil, honey, wax, betel, crls	Bougiah	franc	1835	Medit.
Bourbon	Island	agriculture	sgr, coffee, tobacco, rice, fruits	Bourbon	franc	7115	Island.
Brisbane	N.S. Wales	trade shipping centre	entrepôt, trade centre	Brisbane	sterling	11,295	Colonial.
Brunswick	U. States	shipping trade centre	lumber, cotton, timber	Brunswick	dollar	4020	States.
Brusa	Turkey, A.	silk, cotton stuffs	manufactures transit	G. of Gemlih Mudania	piastre	4005	Black Sea, Levant.
Buenos Ayres	S. America	trade shipping centre	wool, tallow, cereals, ctl	B. Ayres	dollar	6280	S. Americn.
Buffalo	U. States	important trade centre	trade centre	New York	dollar	3568	States.
Bulacan	Philippines	sgr mfc, mats, slk carpts	sgr, mfc, rice, indigo	Balacan	dollar	9550	E. Indian.
Bull River	U. States	shipping	phosphates	Bull River	dollar	3710	States.
Burdwan	Hindostan	agriculture, mining	coal, ores, sgr, crls, ctn	Calcutta	rupee	8000	Indian.
Bushire	Persia	agriculture, transit, cattle	shawls, dye stuffs, fruit, perfumes	Bushire	piastre	6460	Persian Gulf.
Bussorah	Turkey, A.	caravan transit, shipping centre	fruit, copper, silk, coral, metals	Bussorah	piastre	6650	Persian Gulf.
Cabes	Tunis	agriculture	dates, henna	Cabes	piastre	2320	Medit.
Cairo	Egypt	commerce, text, dye, fndry	transit	Alexandria	piastre	3207	Medit.
Calabar	Africa	agriculture	palm oil	Calabar R.	dollar, sterling	4380	West Coast African.
Calcutta	Hindostan	trade centre	trade centre	Calcutta	rupee	7950	Indian.
Caldera	Peru	mining, shipping	ores, bar silver, copper, regulus	Caldera	dollar	9210	W. Coast.
Calicut	Hindostan	cotton, shipping	nuts, woods, spices, cardamoms	Calicut	rupee	6530	Indian.

Calingapatam	Hindostan	transit	jaggery, seeds, horn, hides, jute, cotton	Calingapatam	rupee	7725	Indian.
Callao	Peru	ship transit, mining	guano, copper ore, nitre, bark, wool	Callao	dollar	9970	W. Coast.
Cameroons	Africa	shipping trade centre	ivory, palm oil	Cameroons R.	dollar	4460	West Coast African.
Campana	Brazil	agriculture, mining	wool, hides, produce	B. Ayres.	milrei	6315	S. Americn.
Campeachy	Mexico	agriculture, cigars	logwood, wax	Campeachy	dollar	4600	Mexican.
Canary	Island	textiles, hats, agriculture	wine, silk, vanilla, cochineal	Canary Teneriffe	reals	1625	Island.
Candahar	Afghanistan	caravan centre	transit, Persia and India	Kurrachee	kran, rupee	7560	Indian.
Candia	Crete	soap, distilleries, agr	provisions, soap, wool	Candia	piastre	2995	Medit.
Candy	Ceylon	planters, bricks	transit, depôt	Colombo	sterling	6855	Island.
Cannanore	Hindostn	shipping, transit	pepper, nuts, coir yarn, wood, bamboo	Cannanore	rupee	6520	Indian.
Canton	China	trade, shipping centre (with Hong Kong)	tea, trade centre	Canton Hong Kong	tael	9820	China.
Cape Coast Castle	Africa	native barter	gold dust, ivory, palm oil	C. C. Castle	dollar, sterling	3870	W. C. Afrc.
Cape Town	Africa	trade centre	trade, ship centre	Cape Town	sterling	6060	Cape.
Cape Verds	Islands	salt, agr, linen	fruits, orchil	St. Vincent	reis	2525	Island.
Caracas	S. Amrica	agriculture, shipg, transit	coffee, cacao, indigo, hides, sarsaparilla	Caracas	dollar	4030	S. Amercn.
Cardenas	Cuba	see	Cuba	Cardenas	dollar	4140	W. Indian.
Cartagena	Grenada	ropes, sailcloth	transit	Cartagena	dollar	4900	S. Amercn.
Casablanca	Morocco	agriculture, shipping	transit, cereals	Casablanca	dollar	1405	Medit.
Cayenne	Guiana F.	ship, transit	sugar, coffee, cereals, annotto, spice	Cayenne	franc dollar	4070	S. Amercn.
Ceara	Brazil	ship transit, agriculture	cotton, hides, rubber, sgr	Ceara	milrei	3930	S. Amercn.
Celaya	Mexico	saddles, bridles, leather manufacture	cereals, cattle	Tampico	dollar	5080	Mexican.
Celebes	Islands	shipping, trepang, weaving	gld, mtls, wd, spice, sago, rice, cacoa, coffee, &c.	Macassar	florin	8930	E. Indian.
Ceuta	Morocco	transit, agriculture	oranges	Ceuta	dollar	1325	Medit.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Chagres	N. Grnda	ship, transit	through Aspinwall	Chagres	dollar	4990	Mexican.
Charlotte Town	P. E. Island	shipping	timber, shipping	C. Town	dollar	3700	Island.
Charleston	U. States	entrepôt, shipbuilding	cotton, rice, tobacco, indigo, turps, pitch	Charleston	dollar	3785	States.
Chee-foo	China	shipping	shipping transit	Cheefoo	tael	10,350	Chinese.
Cheribon	Java	agriculture, shipping	coffee, teak, sugar, prodc	Cheribon	florin	8390	E. Indian.
Chicago	U. States	machnry, wares, soap, &c., most important centre	fish, timber, wool, grain, vast emporium	New York	dollar	4189	States.
Chincas	Islands	shipping, guano	guano	Chincas	dollar	9875	Island.
Chinchoo	China	shipping, transit	tea, shipping	Chinchoo	tael	10,100	China.
Chittagong	Hindostan	salt, agriculture	timber, canvas, produce	Chittagong	rupee	8000	Indian.
Chittoor	Hindostan	agriculture, transit	local	Madras	rupee	7420	Indian.
Christchurch	New Zealand	agriculture, commerce, shipping centre	trade centre, transit	Christchurch	sterling	11,950	Colonial.
Chusan	China	agriculture, quarrying	shipping, entrepôt	Chusan	tael	10,420	China.
Cienfuegos	Cuba	agriculture, cigar mfc	sugar, rum, molasses	Cienfuegos	dollar	4350	W. Indian.
Cincinnati	U. States	trade centre	trade centre	Baltimore	dollar	4030	States.
Cobija	Chili	shipping centre, commerce, entrepôt for Bolivia	entrepôt	Cobija	dollar	9490	West Coast
Cochin	Hindostan	shipping	teak, sandal wood, coir, spice	Cochin	rupee	6535	Indian.
Coconada	Hindostan	agriculture, shipping	rice, sesame, cotton	Coconada	rupee	7600	Indian.
Colon	Columbia	entrepôt	canal centre, transit	Colon	dollar	4998	Mexican.
Colombo	Ceylon	agriculture, shipping, coal depôt	spice, coir, coffee, oil, plumbago	Colombo	rupee	6795	Island.

Conception	Chili	agriculture, mining	grain, hides, tallow	Conception	dollar	8600	West Coast
Conception Bay	Newfndland	shipping	wheat, hides, tallow	Conception Bay	dollar, sterling	2205	Island.
Congo River	Africa	agriculture, transit	ivory, palm oil, woods	Livingstone River	dollar	4780	W. C. African.
Constantia	C. Colony	wine	wine	Cape Town	sterling	6069	Cape.
Constantine	Algeria	cloth, wool, lthr, ironwork	cereals, linen, wax	Philippeville	franc	1975	Medit.
Coosaw	U. States	mining, shipping	phosphates	Coosaw R.	dollar	3715	States.
Copiapo	Chili	silver mining	ores, precious metals	Copiapo, Caldera	dollar	9255	West Coast
Coquimbo	Chili	mining, shipping	ores	Coquimbo	dollar	9040	West Coast
Corinto	Nicaragua	shipping, agriculture	sugar transit	Corinto	dollar	11,800	Mexican.
Coromandel C.	India	shipping produce	East Indian produce	Madras	rupee	7340	Indian.
Corrientes	La Plata	ship entrepôt	cotton, tobacco, rice, sugar, indigo	Corrientes River	dollar	6860	South American.
Cuba	Island	agriculture, cigar manufacture	sugar, molasses, coffee, tobac, wood, precious metals	Havana	dollar	4190	W. Indian.
Cuddalore	Hindostan	textiles, manufactures, transit	cotton	Cuddalore	rupee	7340	Indian.
Curaçao	Island	salt	salt, cochineal, cattle	Ste Ana	guilder	3590	W. Indian.
Cyprus	Island	agriculture, weaving	cotton, wine, crls, tobac	Larnaca	piastre	3400	Medit.
Dacar	Africa	shipping, transit	skins, gold dust, wax, ivory, oil	Goree, Dacar	franc	2590	W.C.Afric.
Dacca	Hindostan	filagree work, India muslins	manufactures, transit	Calcutta	rupee	8110	Indian.
Dahomey	Africa	district	Indian corn, yams, manioc	Whydah	dollar	4150	W.C.Afric.
Dalhousie	New Brunswk.	shipping	timber	Dalhousie	dollar	2715	Canadian.
Damascus	Syria	textiles, transit centre	trade centre	Beyrout	piastre	3585	Levant.
Damietta	Egypt	internal transit, fish, rice	coffee, beans, linen	Damietta	piastre	3335	Medit.
Darjeeling	Hindostan	local	local	Calcutta	rupee	8275	Indian.
Delhi	Hindostan	text, indigo, shawls, jwlly	crls, mfc, precious stones	Bombay	rupee	7575	Indian.
Demerara	Guiana, B.	shipping	sugar, rum, molasses, wds	Demerara	dollar	4030	S.Americn.
Denver	U. States	commercial centre	transit, entrepôt	Baltimore	dollar	5138	States.
Detroit	U. States	machinery, manufactures	lumber, transit	New York	dollar	3915	States.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Diego Garcia	Island	agr, oil, coal station	cotton, soap, oil, turtle	Diego Garcia	franc	6800	Island.
Doboy	U. States	shipping, wood centre	timber	Doboy	dollar	4040	States.
Dunedin	N. Zealand	agriculture, commerce	transit goods	Dunedin	sterling	12,180	Colonial.
Durban	Africa	agriculture, transit	indigo, coffee, sugar, wood	Port Natal	sterling	6815	Cape.
East London	Africa	shipping	wool, cotton	E. London	sterling	6350	Cape.
Elmina	Africa	fishing, agriculture	transit, ivory, cereals	Elmina	cowrie	3860	W.C. Afric.
Ensenada	La Plata	shipping	wool, hides, tallow, cereals	Ensenada	dollar	6360	S. Americn.
Erzeroum	Armenia	lthr, carpets, silk, brass	important transit	Trebizonde	piastre	3780	Black Sea.
Falkland I.	Islands	farming, agriculture	hides, oil, wool	Stanley	sterling	7400	Island.
Famagousta	Cyprus	agriculture	cereals, locust beans, wine, cotton, wool	Famagousta	piastre	3400	Medit.
Fernando Po	S. Africa	agriculture, coal station	sugar, woods, yam, prodc	Frnando Po	dollar	4440	Island.
Fiji	Islands	fibre cloth, agriculture	cotton, East Indian produce, fruits	Levuka	sterling, dollar	11,720	Island.
Foo-chow	China	combs, screens, transit	tea, timber, bamboo, tobacco, fruit	F.-chow-foo	tael	10,240	China.
Fo-kien Dist.	China	see AMOY	district	Amoy	tael	10,015	China.
Formosa I.	China	agriculture	rice, camphor, sulphur, fruit, cereals	Kelung	tael	10,045	China.
Freemantle	W. Astrlia	shipping, transit	wood, wool, ores, transit	Freemantle	sterling	7400	Colonial.
Frey Bentos	La Plata	agr, extract meat mfc	hides, skins, tallow, bones	F. Bentos	dollar	6365	S. Americn.
Friendly	Islands	agriculture, farming	cocoa nut. oil	Tonga	sterling	12,000	Island.
Funchal	Madeira	shipping	shipping, provs, wine	Funchal	reis	1400	Island.
Gaboon	Africa	transit, agr, factories	ivory, copal, ebony, dye woods	Gaboon R.	franc	4480	W.C. Afric.
Galveston	U. States	shipping, shipbuilding	cotton	Galveston	dollar	4990	States.
Gambia District	Africa	agriculture	wax, teak, camwd, ivory, hides, oil	Bathurst	sterling franc	2680	W.C. Afric.
Gaza	Syria	soap, ctn, trade entrepôt	nuts, crls, trans, produce	Gaza	piastre	3545	Levant.
Geelong	Australia	shpg centre for Melbourne	wool, tallow, gold dust	Geelong	sterling	11,250	Colonial.

George Town	Guiana, B.	ship transit	sugar, rum, coffee	George Twn	dollar	4040	S. Americn.
George Town	U. States	lumber, tannery, mills	local, lumber	George Twn	dollar	3680	States.
Ghemlik	Turkey, A.	silk, cotton stuffs	manufactures, transit	Ghemlik	piastre	3085	Black Sea.
Gilolo	Moluccas	agr, important centre	East Indian produce	Gilolo	florin	10,000	E. Indian.
Gladstone	Queenslnd	shipping, commerce	wool, cereals, transit	Gladstone	sterling	11,240	Colonial.
Goa	Hindostan	transit	hemp, betel, tin, cotton	Goa	rupee	6380	Indian.
Gondar	Abyssinia	fine cotton cloths	transit	Massowah	dollar	4540	Red Sea.
Gopaulpore	Hindostan	shipping, agriculture	rice, sgr, hides, seeds, turmeric, cereals, pulse, wood, hemp	Gopaulpore	rupee	7730	Indian.
Goree	Island	entrepôt, shipbuilding	entrepôt, skins, ivory, oil	Goree	franc	2590	W.C.Afric.
Gorontalo	Celebes	shipping, transit	wax, gold dust, spice, wds	Gorantalo	florin	9400	E. Indian.
Grahamstown	Africa	tannery, breweries, trans	ivory, wool, skins	Bathurst, Algoa Bay	sterling	6400	Cape.
Granada	Nicaragua	agriculture, entrepôt	indigo, hides, wood	Corinto	dollar	11,880	Mexican.
Grandpopo	Africa	agriculture, transit	palm oil, kernels, ivory	G. Popo	dollar, franc sterling	4050	W.C.Afric.
Grenada	Island	sugar mills, agriculture	sugar, rum, molasses	St. George	dollar, sterling	3950	W. Indian.
Grey Town	C. Amer.	transit, shipping	hides, indigo, spice	Grey Town	dollar	5180	Mexican.
Guadeloupe	Island	agriculture	sugar, coffee, dye woods, rum, ctn, wool, hides, confect, copper, tobac	Point à Pitre	franc	3700	W. Indian.
Guatemala	C. Amer.	agriculture, entrepôt	cochineal, indigo, caoutchouc, cotton, coffee, vanilla	Istapal (Guatemala)	dollar	12,050	Mexican.
Guayaquil	Ecuador	entrepôt	cacao, rubber, hides, bark	Guayaquil	dollar	10,670	W. Coast.
Haifa	Syria	agriculture	cotton, oil, cereals, fruits	Haifa	piastre	3500	Levant.
Haiphong	Tonquin	shipping, transit	rice, hides, tea, cotton	Haiphong	dollar	9640	China.
Hakodadi	Japan	entrepôt	wood, fish, charcoal, silk	Hakodadi	yen, dollar	11,535	Japanese.
Halifax	N. Scotia	shipbldg, entrepôt, snuff, leather, fishing, soap, brewing, distilleries	fish, lumber, coal, produce	Halifax	dollar	2685	Canadian.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Hamadan	Persia	caravan centre, carpets, &c.	transit	Bussorah	kran	7000	Pers. Gulf.
Hang-choo District	China	silk manufactures, taffetas, satins	manufactures, produce	Amoy	tael	10,020	China.
Hankow	China	trade centre, metal work, cotton, textile, foundry	cotton, tea, lead, copper, tin, iron	Shanghai	tael	10,940	China.
Han-yang	Corea	trade centre	trade centre	Han-yang	tael	10,975	Chinese.
Havana	Cuba	cigars, chocolate, hats, trade centre	sugar, tobacco, molasses, rum, cigars	Havana	dollar	4190	W. Indian.
Hawaian	Islands	agriculture, fishing	frts, coff, arrowroot, rice	Hilo	dollar	13,200	Island.
Hawkesbury	N. Zealand	shipping, transit	wool, transit	Hawkesbury	sterling	12,180	Colonial.
Hayti	Island	mining, gold washing, agriculture	minerals, coffee, indigo, sugar, cotton, cacao, logwood, mahogany	Port-au-Prince	dollar	4000	W. Indian.
Herat	Afghanistn	carpets, sword blades	assafœtida, saffron	Kurrachee	rupee	6900	Indian.
Hiogo	Japan	shipping, transit	woods, hides, seaweed, silk	Hiogo	yen, dollar	11,050	Japanese.
Hobart Town	Tasmania	brewing, tanning, foundy, timber mills, shpbldg	trade, transit centre	Hobart Town	sterling	11,280	Colonial.
Hoihaw	China	mining, agriculture, fishg	gold, lapis lazuli, rice, sgr, tobac, wd, wax, frts	Hoihaw	tael	9500	China.
Hokitika	N. Zealand	gold mining	local	Hokitika	sterling	11,850	Colonial.
Honduras District	C. America	agriculture	mahogany, cedar, log, rosewd, sgr, rum, molss	Truxillo	dollar	4470	Mexican.
Hong-Kong	China	trade centre	trade centre	Hong-Kong	tael, dollar	9780	China.
Honolulu	Sandwich Islands	entrepôt	sugar, wool, cotton, frts, rice, hides, tallow	Honolulu	dollar	13,330	Island.
Hoo-choo-foo	China	silks, crapes, fans	raw silk, produce	Hang-choo	tael	10,170	China.
Huasco	Chili	mining	ores	Huasco	dollar	9110	W. Coast.
Hue	Anam	agriculture, shipping	tea, rice, E. I. produce	Hue	dollar	9300	China.

Hurdwar	Hindostan	commercial centre	transit	Bombay	rupee	7695	Indian.
Hyderabad	Hindostan	silk (gold interweaving), turbans	manufactures	Bombay	rupee	6780	Island.
Hyderabad	Hindostan	arms, ornamental silks, cottons	manufactures, transit	Kurrachee	rupee	6210	Indian.
Iceland	Island	fishing, local textiles, agriculture	wool, oil, fish, sulphur, Iceland moss	Reykjavik	ore, sterling	1300	Island.
Ichaboe	Island	guano	guano	Ichaboe	dollar	5510	Island.
Iloilo	Philip'nes	turtle, fish, silk, ctn fabrics	mfc, East Indian produce	Iloilo	dollar	9550	E. Indian.
Imbituba	Brazil	agriculture, shipping	hides, wool, horns, prodc	Imbituba	milrei	5565	S. Americn.
Indianapolis	U. States	flour, saw, paper mills, iron foundry	local transit	Philadelphia	dollar	3880	States.
Inhambane	Africa	river transit	ivory, beeswax	Inhambane	dollar	7300	Cape, E.C. African.
Invercargill	N.Zealand	shipping centre	entrepôt	Invercar gill	sterling	12,300	Colonial.
Iquique	Peru	saltpetre works, mining	ores, guano, nitrate	Iquique	dollar	9580	WestCoast.
Ismailia	Egypt	canal depôt	transit, canal	Port Said	piastre	3413	Medit.
Ispahan	Persia	text, trinkets, glass, ware	transit manufactures	Bussorah	piastre	6930	Persn.Gulf.
Jacksonville	U. States	emporium	entrepôt	Savannah, Jacksonville	dollar	3930 *viâ* Savan'ah	States.
Jacmel	Hayti	shipping, agriculture	coffee, logwood, gaiac, mahogany	Jacmel	dollar	4000	W. Indian.
Jaffa	Syria	soap, agriculture, transit	soap, crls, fruit, ctn, coral	Jaffa	piastre	3545	Levant.
Jamaica	Island	sugar, planters	spice, rum, fruits, sugar, coffee, indigo	Kingston	dollar, sterling	4210	W. Indian.
Java	Island	planters	farinaceous food, coffee, sugar, spice, tobacco	Batavia	florin	8330	E. Indian.
Jeddah	Arabia	dates, balsam	coffee, coral, cutlery	Jeddah	piastre	4100	Red Sea.
Jerusalem	Syria	local	local	Jaffa	piastre	3578	Levant.
Kaifa	Syria	agriculture	cereals, fruit, oil	Haifa	piastre	3500	Levant.
Kaladash	Syria	agriculture	wheat, barley, cotton	Karadash	piastre	3525	Levant.
Kashan	Persia	caravan centre, coloured and flowered silks, &c.	transit	Bushire	kran	6800	Pers. Gulf.
Kashbin	Persia	agriculture, grapes, nuts	agriculture, produce	Bushire	kran	6980	Pers. Gulf.
Kelung	Formosa	shipping	shipping transit	Kelung	tael	10,225	China.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Khartoum	Nubia	commercial barter	textiles, shoes, hardware	Suakim	piastre	4665	Red Sea.
Khojend	Tartary	textiles, entrepôt	extensive caravan transit	Kurrachee, Bushire	kran, rupee	7450 *viâ* Peshwur Balkh	Cent. Asia.
Kiama	W. Africa	transit with Dahomey	transit with Dahomey	Whydah	dollar	4610	W.C.Afric.
Kiatcha	Siberia	border town, barter	transit China, Siberia	Tientsin	rouble	12,160 *viâ* Pekin	China.
Kien-chang-foo	China	linen from hemp	rice, wine	Kien-choo-foo	tael	9460	China.
Kien-chien	China	coral, salt, gold, silver	rice, sugar, wax, pearls	Kien-chien	tael	9650	China.
Kingston	Jamaica	planters	fruits, sugar, coffee, cotton, tobacco	Kingston	dollar, sterling	4210	W. Indian.
Kingston	Australia	shipping, agriculture	wool, skins, hides, wheat, tallow	Kingston	sterling	8745	Colonial.
Kingston	U. States	iron, tobacco, leather	manufactures, trans, wood	Richibucto	dollar	2875	Canadian.
Kin-te-Ching	China	finest porcelain in the world	manufactures	Shanghae	tael	about 11,000	Chinese.
Kumassi	Africa	agriculture, commerce	transit, ivory, produce	C. C. Castle		3960	W. C. Afrc.
Kurrachee	Hindostn	ship, commercial transit	saltpetre, rice, cereals	Kurrachee	rupee	6110	Indian.
Kutaya	Turkey, A.	centre carpet manufactures	mfc, caravan transit	Smyrna	lira	3145 *viâ* Smyrna	Levant.
Labuan	Borneo	ironstone, freestone, petroleum	coal to Singapore	Labuan	dollar	8900	E. Indian.
Lagos	Africa	agriculture, commerce	ivory, cotton, palm kernels, oil	Lagos	dollar, sterling	4150	W.C. Afrc.
Laguna	Mexico	shipping transit	logwood, skins	Laguna	dollar	4700	Mexican.
Lahore	Punjab	mirrors, lacquered ware, silk, shawls	manufactures	Kurrachee	rupee	6910	Indian.
Larnaca	Cyprus	manufactures, agriculture, shipping	crls, locust beans, wine, cotton	Larnaca	piastre	3400	Medit.

Laraiche	Morocco	agriculture	beans, seeds, wool, hides, skins	Laraiche	dollar	1315	Medit.
Las Palmas	Canary I.	shipbuildg, fishing, hats, textiles	wine, cochineal	Palmas	reals	1640	Island.
Latakiyah	Syria	agriculture	tobacco, raisins	Latakiyah	piastre	3530	Levant.
Launceston	Tasmania	shipping, commerce	wool, transit	Launceston	sterling	11,260	Colonial.
Lawrence	U. States	extensive cotton, wool industry	transit	New Orleans	dollar	4620	States.
Lawrenceburg	U. States	entrepôt	transit entrepôt	Baltimore	dollar	4055	States.
Lien-chow	China	planters	tea transit	Canton	tael	10,030	China.
Lima	Peru	gold lace fringes, glass, cotton, chocolate, paper	transit through Callao	Callao	dollar	9975	W. Coast.
Limasol	Cyprus	extensive transit, ship	cereals, wine, locust beans	Limasol	piastre	3380	Medit.
Loango	Africa	agriculture	palm oil, kernels	Loango	dollar	4680	W. C. Afrc.
Lobos	Islands	guano	guano	Lobos	dollar	10,150	Island.
Louisville	U. States	entrepôt	transit entrepôt	Baltimore	dollar	4130	States.
Lowell	U. States	text, Manchester of U.S.	trade centre	Boston	dollar	3060	States.
Lucknow	Hindostn	transit	transit	Calcutta	rupee	8560	Indian.
Luzon	Island	see Manila	E. I. produce	Luzon	dollar	9650	E. Indian.
Lydda	Syria	agriculture	cereals, transit	Jaffa	piastre	3557	Levant.
Lynn	U. States	great centre shoes	shoes	Boston	dollar	3040	States.
Lyttleton	N. Zealnd	agriculture, commerce	shipping, wool	Lyttleton	sterling	11,950	Colonial.
Macao	Tonquin	planters, coolie traffic	tea, rice, aniseed, &c.	Macao	tael	9600	China.
Macassar	Celebes	agriculture	spice, salt, coffee, opium, pearls	Macassar	florin	8930	East Indian.
Maceio	Brazil	planters, boat-building	rum, cotton, sugar, hides	Maceio	milreis	4250	S. Americn.
Mackay	Queensld	shipping, farming	wool, cereals	Mackay	sterling	11,500	Colonial.
Madagascar	Island	agriculture, carpets, jewellers	cattle, rice, cotton, silk, caoutchouc, gum, wax	Tamatave	dollar	6790	Island.
Madeira	Island	agriculture, ship provs	wine, fruits, produce	Funchal	reis	1400	Island.
Madras	Hindostan	shipping, transit, commerce	cotton, cereals, indigo, piece goods, pepper	Madras	dollar	7340	Indian.
Magdala	Abyssinia	agriculture	produce	Hanfila	piastre	4660	Red Sea.
Makallah	Arabia	shipping	coasting, transit	Makallah	piastre, rupee	4995	Red Sea.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Malabar Coast	India	agriculture, shipping	spice, yams, coir rope, copperas, arrowroot	Cannanore	rupee	6520	Indian.
Malacca	Malay P.	agriculture, dammar, shipping, ship stores	gold dust, ebony, pepper, hides, ornamental woods	Malacca	rupee	8215	East Indian.
Maldon	Island	guano	guano	Maldon I.	dollar	11,000	Island.
Manama	Bahrein I.	centre pearl fishing	produce	Manama	piastre, kran	6280 sea	Pers. Gulf.
Mangalore	India	agriculture	rice, pepper, cassia, turmeric, sandal wood	Mangalore	rupee	6510	Indian.
Manila	Philippines	cigars, cord, piñas	sugar, tobacco, indigo, hemp, cord, rice	Manila	dollar	9650	East Indian.
Maracaibo	Venezuela	shipbuilding, agriculture, shipping	silver ore, fustic, divi divi, copper, asphalte, petroleum, crls, tobac, coff	Maracaibo	dollar	3780	South Americn.
Maranham	Brazil	agriculture	rice, ctn, rum, medicines	Maranham	milrei	4130	S. Americn.
Marash	Turkey, A.	agr, iron, steel, mines	tobacco, rice, crls, wood	Latakiyah	piastre	3610	Levant.
Maroim	Brazil	planters	sugar, cotton	Aracaju	milrei	4080	S. Americn.
Martaban	Burmah	agr, transit Moulmein	spices, rice, wood	Martaban	rupee	8020	Indian.
Maryborough	Queensland	foundry, shipbuilding, sawmills	gold, copper, antimony, wool, sugar	Maryborough	sterling	11,395	Colonial.
Manzanillo	Cuba	agriculture	tobac, mahogany, cedar, sugar	Manzanillo	dollar	4100	West Indian.
Massowah	Abyssinia	commerce, transit	gold, ivory, honey, wax, horns	Massowah	piastre	4310	Red Sea.
Masulipatam	India	chintz, textiles	cotton, cereals, piece goods, tobacco	Masulipatam	rupee	7550	Indian.
Matamoros	Mexico	agriculture	specie, wool, hides	Matamoros	dollar	4940	Mexican.
Matanzas	Cuba	planters	sugar, molasses, coffee	Matanzas	dollar	4180	W. Indian.
Matto Grosso	S. America	agricultural	cattle, horses, produce	Porto Alegre	dollar	7500	S. Amercn.
Matsmai	Japan	agriculture	transit, produce	Matsmai	yen	11,700	Japanese.

Mauritius	Island	agriculture	sugar, rice, maize, coffee, pepper, mulberry	Mauritius	dollar	7005	Island.
Mayaguez	P. Rico	entrepôt, manufactures	sugar, molasses, rum, coffee, tobacco, cotton	Mayaguez	dollar	3750	W. Indian.
Mayotta	Island	planters	sugar, coffee	Mayotta	franc	6575	Island.
Mazagan	Morocco	agriculture	wool, cereals	Mazagan	dollar	1360	Medit.
Mazattan	Mexico	shipping, commerce	minerals, wood	Mazattan	dollar	12,670	Mexican.
Mecca	Arabia	pilgrim, agriculture, transit	goods, trinkets, transit	Jeddah	piastre, dollar	4160	Red Sea.
Medina	Arabia	caravanserais	pilgrim commerce	Yembo	piastre	4050	Red Sea.
Melbourne	Australia	trade centre	trade centre	Melbourne	sterling	11,250	Colonial.
Memphis	U. States	emporium	transit, entrepôt	New Orleans	dollar	5040	States.
Merve	Tartary	emporium	transit, entrepôt	Kurrachee, Bushire	kran	7410 *viâ* Peshwur & Balkh	Cent. Asia.
Messida	Algeria	mining	minerals, ores	Messida	franc	1520	Medit.
Minatitlan	C. Amrica	shipping, agriculture	mahogany, produc	Minatitlan	dollar	4900	Mexican.
Miramichi	N. Brnswk	shipping, shipbuilding	lumber, salmon	Miramichi	dollar	2900	Canadian.
Mirzapore	India	crpts, cotton, iron, depôt	cotton emporium, transit	Calcutta	rupee	8420	Indian.
Mobile	U. States	entrepôt	timber, cotton	Mobile	dollar	4620	States.
Mocha	Arabia	traders	coffee emporium	Mocha	piastre, dollar	4550	Red Sea.
Mogadore	Morocco	entrepôt, agriculture	wool, wax, hides, gold dust	Mogadore	dollar	1440	Morocco. (W.C.Afrc.)
Molucca	Islands	agriculture	spices	Gilolo	florin	10,150	E. Indian.
Mombasa	Africa	shipg, caravan centre, agr	transit, produce	Mombasa	dollar	6165	E. African.
Monterey	California	mining	gold, silver, lead ore	Monterey	dollar	13,570	States.
Monte Video	S. Amrica	trade centre, shipping	hides, tallow, jerked beef, wool	M. Video	dollar	6170	S. Americn.
Montreal	Canada	entrepôt, h'ware, sleighs, foundries, distilleries, breweries, soap works	timber, shipping, fur	Quebec	dollar	3070	Canadian.
Mooltan	India	silks, ctns, shawls	commerce, transit	Kurrachee	rupee	6700	Indian.
Moorshedabad	Hindostan	silk, carpets, textiles, pongees, brocades, tissues	transit	Calcutta	rupee	8095	Indian.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London	Natural Division of Trade.
Moorzuk	Fezzan	caravan centre	transit	Tripoli	cowrie	2900	Medit.
Morocco	Morocco	tan, dye, fancy goods	ores, wheat, maize, millet, beans	Mogadore Mazagan	dollar	1470	Medit. W. C. Afrc.
Mostaganem	Algeria	crpts, text, lthr, esparto	cereals, wool, hides	Mostagenem	franc	1575	Medit.
Moulmein	Burmah	agriculture, shipping	teak, rice, ivory, tobacco, manna	Moulmein	dollar	8020	Indian.
Mosul	Turkey, A.	napkins, cotton stuffs, muslins, marble	entrepôt	Bussorah	piastre	7170	Prsian Glf.
Mozambique	Africa	shipping	ivory, coffee, coir, orchil, betel	P. Mozmbqe	dollar	6850	E. C. Afrc.
Muscat	Arabia	shipping, entrepôt	important transit	Muscat	piastre	5900	Pers. Gulf.
Nagasaki	Japan	entrepôt, agriculture, arms, ammunition	tea, camphor, cotton, tobacco, silk	Nagasaki	yen, dollar	10,775	Japanese.
Nagpore	Hindostan	textiles, ware, commerce	local	Bombay	rupee	6700	Indian.
Nankin	China	fine satin, crape, cotton, silk, nankeen, paper, ink	mfc, local (considerable)	Shanghai	tael, dollar	10,742	China.
Napier	N. Zealand	shipping, commerce	wool, transit depôt	Napier	sterling	12,120	Colonial.
Natal	Africa	agriculture, shipping	sugar, wool, hides	Natal	sterling	6810	Cape.
Natchez	U. States	cotton emporium	trade centre	New Orleans	dollar	4930	States.
Natividad	Brazil	mining, agriculture	produce	Porto Alegre	dollar	6710	S. Amercn.
Negapatam	India	shipping	ship supplies	Negapatam	rupee	7180	Indian.
Nelson	N. Zealand	breweries, saw, flour mills, mining	iron, copper, gold	Nelson	sterling	11,870	Colonial.
New Amsterdam	Guiana, B.	agriculture, planters	rum, sugar, wood, cotton, hides	Berbice, N. A'sterdam	dollar	4060	S. Amercn.
Newark	U. States	centre, silks, lthr, trunks	manufactures	New York	dollar	3255	States.
New Bedford	U. States	fishing, centre whale fishing	fishing, shipping	Boston, New Bedford	dollar	3090	States.
Newcastle	N. S. Wales	shipping, mining	coals	Newcastle	sterling	10,915	Colonial.
New-Chwang	China	planters, transit	beans, oils, silk, jute, tobac	Nieuchwang	tael	11,165	China.

New Dongola	Nubia	entrepôt, indigo works	caravan centre	Suakim	piastre	4765	Red Sea.
Newfoundland	America	fishg, mining, agriculture	fish, oil	St. Johns	dollar	2205	Island.
New Orleans	U. States	foundry, distilleries, rfnry, sugar mills, tobac mfc	cotton entrepôt, sugar, molasses	NewOrleans	dollar	4690	States.
New Plymouth	N.Zealand	breweries, mills, agr	local, fishing, transit	New Plymth	sterling	11,710	Colonial.
New York	U. States	trade centre	trade centre	New York	dollar	3245	States.
Niagara	U. States	entrepôt	transit Canada, States	New York	dollar	3670	States.
Nicolaevsk	Russia, A.	agriculture, shipping	cereals	Nicolaevsk	rouble	12,500	N. Asian.
Nicoya	C.America	weaving, shipbuilding	sugar	Nicoya	dollar	11,620	Mexican.
Ningpo	China	silk, textiles, junk bldg	tea, silk, cotton, transit	Ningpo	tael	10,400	China.
Norfolk	U. States	agr, shipping, dock yard	cotton, timber, transit	Norfolk	dollar	3405	States.
Nossi-be	Africa, M'gascar	agriculture	ebony, sesame, sugar, rice, wax	Nossi-be	dollar	6570	Island.
Noumea	N.C'idona	agriculture, mining	minerals, maize	Noumea	dollar	12,000	Island.
Novgorodski	Siberia	commerce, shipping	furs, minerals	Novgordski	rouble	11,700	N. Asian.
Oajaca	Mexico	entrepôt	transit, minerals, cereals	Samiltepec	dollar	12,050	Mexican.
Oamaru	N.Zealand	agriculture	wool	Amaru Bluff	sterling	11,970	Colonial.
Oeiras	Brazil	agricultural	produce	Maranhao	dollar	4500	S. Amercn.
Omaha	U. States	transit, quarry	trans (important internal)	New York	dollar	4549	States.
Oosaka	Japan	ship transit with Hiògo	rice, cereals	Oosaka	yen dol.	11,085	Japanese.
Oran	Algeria	foundry, tannery, tobac mfc, breweries, vermicelli manufacture	cereals, hides, tobacco, tallow, sugar, esparto	Oran	franc	1540	Medit.
Oregon City	Oregon	entrepôt	transit cereals	Portland	dollar	14,370	States.
Orfah	Turkey, A.	coarse woollens, cottons	local	Latikiyah	piastre	3715	Levant.
Orinoco	Venezuela	agriculture	ctn, indigo, tobac, coffee	R. Orinoco	dollar	4400	S. Amercn.
Orizaba	Mexico	entrepôt	transit, cereals, produce	Vera Cruz	dollar	4935	Mexican.
Orleansville	Algeria	important market, agr	corn, wool	Tenes	franc	1630	Medit.
Otago	N.Zealand	gold fields, agriculture	gold, wool	Otago	sterling	12,170	Colonial.
Otaheite	Society I.	boat building, agriculture	sugar, cocoanut oil, arrowroot	Tahiti	franc	11,705	Island.
Ottawa	Canada	flour mills, agriculture	lumber	Montreal	dollar	3170	Canadian.
Oude	India	agriculture	cereals, rice, sugar, indigo	Calcutta	rupee	8520	Indian.
Padang	Sumatra	agriculture, goldsmiths	cassia, gold, benzoin oil, camphor, coffee, pepper	Padang	dollar	8260	Straits & E. Indian.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Palma	Canary	silk taffetas, satin, ribbons, shipbuilding, agr	wine, fruits, cereals	Palma	reals	1640	Island.
Panama	Central America	entrepôt	hides, shells, coffee, gold dust	Panama	dollar	11,350	Mexican.
Para	Brazil	shipping, agriculture	rice, dye wood, cacao, sarsaparilla	Para	milrei	4160	South Americn.
Parahiba	Brazil	shipping, transit	cotton, wood, gum, rum, balsam, sugar	Parahiba	milrei	4120	South Americn.
Paramaribo	Guiana D.	transit, commerce	sugar, coffee, cotton, indigo, cacao	Paramaribo	dollar	4080	South Americn.
Parana	La Plata	tannery, lime works	rum, pimento, caoutchouc	Parana	dollar	6535	S. Americn.
Pascagoula	U. States	shipping	timber	Pascagoula	dollar	4610	States.
Patna	India	table linen, wax candles, agriculture, bird cages	rice, opium, saltpetre, sugar, indigo	Calcutta	rupee	8250	Indian.
Paysandu	Brazil	manufactures, agriculture	hides, bones, tongues	Paysandu	milrei	6410	S. Americn.
Payta	Peru	shipping	cotton, bark, hides, drugs	Payta	dollar	10,250	W. Coast.
Pegu	Burmah	agriculture, mining	rice, teak	Rangoon	rupee	8080	Indian.
Peel	W. Astrlia	shipping entrepôt	wool, cereals	Peel	sterling	7400	Colonial.
Pekin	China	entrepôt, trade centre	tea, rice, produce	Tientsin	tael	11,230	China.
Pelotas	Brazil	shipping, agriculture	hides, horns, tallow, salted beef	Pelotas	milrei	5870	S. Americn.
Penang	Malacca	entrepôt	trade centre	Penang	dollar	7930	Strts & E. I.
Pensacola	U. States	shipping, sawmills	timber	Pensacola	dollar	4540	States.
Perim	Arabia	coal station	coal, transit	Perim	rupee piastre	4575	Red Sea.
Pernambuco	Brazil	transit, commerce	sgr, timber, dye wds, ctn	Pernambuco	milrei	4130	S. Americn.
Perth	W. Astrlia	commerce, depôt	wool, cereals	Perth	sterling	7400	Colonial.
Perth	Canada	pottery, shipping	timber	Perth Montreal	dollar	3170	Canadian.
Peshawur	Hindostan	entrepôt, mining	transit entrepôt, rice	Kurrachee	rupee	7160	Indian.

Petropaulvski	Siberia	shipping	local	Petroplvski	rouble	13,500	N. Asian.
Philadelphia	U. States	trade centre	trade centre	Philadelphia	dollar	3360	States.
Philippeville	Algeria	shipping, agriculture	cereals, esparto	Philippeville	franc	1935	Medit.
Philippine	Islands	textiles, hats, cord, cigars, mats, shipbuilding	sugar, tobacco, manila hemp, indigo, coffee, birds' nests, trepang	Manila	dollar	9650	E. Indian.
Picton	N. Zealnd	shipping, commerce, agr	wool, cereals, minerals	Picton	sterling	11,875	Colonial.
Pictou	B. Amrica	mining, shipping	coal, wood, transit	Pictou	dollar	2755	Canadian.
Pisagua	Peru	mining, shipping	nitrate	Pisagua	dollar	9630	W. Coast.
Pittsburg	U. States	centre iron industry, coal, glass	emporium	New York	dollar	3515	States.
Piura	Peru	transit, agriculture	maize, cotton, sugar, fruit	Payta	dollar	10,280	W. Coast.
Plymouth	Tobago	planters	sugar, rum, molasses, cotton	Plymouth	dollar sterling	3930	W. Indian.
Plymouth	U. States	shipping	wood, local	Plymouth	dollar	3065	States.
Point à Pitre	Guadloup	shipping, planters	sugar, coffee, cocoa, rum, molasses	P. à Pitre	dollar	3700	W. Indian.
Point-de-Galle	Ceylon	coal station, shipping	coir, oil, arrack, cotton, coffee, rice, ivory	Galle	rupee	6815	Island.
Pondicherry	India	textiles, agriculture	cotton, rice, indigo, tobacco, handkerchiefs	Pondicherry	rupee	7240	Indian.
Ponga River	Africa	factories, agriculture	palm nuts, kernels, oil	Ponga River	dollar	2890	W. C. Afrc.
Port Alfred	Australia	agriculture, shipping	bark, leather, hides, crls	Port Alfred	sterling	8650	Colonial.
Port Alfred	Africa	shipping, agriculture	wool, horns, hides	Port Alfred	sterling	6330	Cape.
Port Augusta	S. Austrlia	agriculture, mining	copper, wool, tallw, hides, cereals	Pt. Augusta	sterling	8700	Colonial.
Port-au-Prince	Hayti	planters	coffee, cocoa, logwood, mahogany	Port-Prince	dollar	4000	W. Indian.
Port Chalmers	N.Zealnd	shipping, transit	transit depôt, wool	P. Chalmers	sterling	12,170	Colonial.
Port Darwin	Australia	shipping, agriculture	wool, cereals	P. Darwin	sterling	11,600	Colonial.
Port Denison	Queenslnd	shipping, agr, mining	wool, tallow, hides, skins, gold	P. Denison	sterling	11,595	Colonial.
Port Elizabeth	Africa	shipping, transit	wool, skins, hides, ivory	P. Elizabeth	sterling	6335	Cape.
Port Louis	Mauritius	shipping	sugar, cattle	P. Louis	dollar	7005	Island.
Port Louis	Guadloup	planters	sugar, rum, molasses	P. Louis	dollar	3700	W. Indian.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Port Louis	Senegal	shipping, agriculture	gum, skins, gold, ebony	P. Louis	franc	2500	W.C.Afric.
Port Mozambique	Africa	shipping, agriculture	ivory, rubber, oil seeds, copra	P. Mozambique	reis	6850	E.C.Afric.
Port Natal	Africa	entrepôt, shipping	sugar, wool, skins, hides	P. Natal	sterling	6810	Cape.
Port Nolloth	Africa	mining, shipping	copper ore, hides, skins	P. Nolloth	sterling	5760	Cape.
Port Philip	Victoria	shipping	transit for Melbourne	P. Philip	sterling	11,250	Colonial.
Port Royal	Jamaica	shipping, planters	spice, rum, frts, sgr, coff	P. Royal	dollar	4210	W. Indian.
Port Royal	U. States	transit, shipping	timber, wool, cotton	P. Royal	dollar	3745	States.
Port Royal	Martinique	planters	W. I. produce	P. Royal	guilder dollar	3715	W. Indian.
Port Said	Egypt	shipping, transit	coal station	P. Said	piastre	3365	Medit.
Port Seguro	Africa	factories, agriculture	palm oil, ctn, krnls, nuts	P. Seguro	dollar	3985	W.C.Afric.
Porto Alegre	Brazil	shipping, agriculture	hides, horns, bones, wool	P. Alegre	reis	6005	S. Amercn.
Porto Rico	Island	shipping, entrepôt, agr	sgr, molasses, coff, tobac, hides, rum, cotton	San Juan	dollar, escudor	3750	W. Indian.
Portland	U. States	iron facty, tannery, poty, rope	lumber, fish, provisions, depôt	Portland	dollar	3000	States.
Portland	Oregon	shipping	wheat	Portland	dollar	14,365	States.
Portsmouth	U. States	shipbuilding, transit	cereals, prvs, transit	Portsmouth	dollar	3020	States.
Potosi	Bolivia	mining silver	produce	Cobija	dollar	9850	W. Coast.
Praya	Cpe Verds	coal depôt, shipping	orchilla, oil seeds	Praya	reis	2525	Island.
Progresso	C. Amer.	shipping, transit	wood, sugar, skins, wax	Progresso	dollar	4650	Mexican.
Puerto Principe	Cuba	agriculture, planters	tobacco, sugar, rum, &c.	Puerto Principe	dollar	4000	W. Indian.
Punta Arenas	Chili	entrepôt	coff, hides, indigo, wood	Coquimbo	dollar	9120	WestCoast.
Punta Arenas	Mexico	shipping, mining	cereals, hides, provisions	P. Arenas	dollar	11,620	Mexican.
Quebec	Canada	textiles, trade centre	timber, trade centre	Quebec	dollar	2930	Canadian.
Quilimane	Africa	entrepôt	emporium, produce	Quilimane	dollar	7150	E. African.
Quito	Ecuador	textiles, confectionery	cereals	Esmeralda	dollar	11,000	S. Americn.
Quitta	Africa	factory, agriculture	palm oil, cotton	Quitta	dollar	3957	W.C.Afric.

Rabat	Morocco	agriculture, ship transit	oil, wool, almonds, skins	Rabat	dollar	1345	W.C.Afric.
Rangoon	Burmah	shipg,dockyards,rice mills	rice, teak, cotton, cutch	Rangoon	rupee	8025	Indian.
Reshd	Persia	agricultural	transit with Russia	Bushire	kran	7080	Pers. Gulf.
Réunion	Island	agriculture	sgr,coffee,tobac,rice,fruits	St. Denis	franc	7115	Island.
Rhodes	Island	agriculture, transit	corn, fruit, wine	Rhodes	piastre	3100	Medit.
Richmond	U. States	cotton factory, tobacco, flour, ironworks	cereals, flour, tobacco	Richmond	dollar	3495	States.
Rio Grand del Norte	Mexico	mining, agriculture	cotton, sugar, mandioc	Rio Grande	dollar	4900	Mexican.
Rio Grand do Sul	Brazil	shipping	beef, tallow, flax, horns, hides	Rio Grande	milrei	5870	South American.
Rio Janeiro	Brazil	leather, glass, ship entrepôt	coffee, sugar, rice, millet, cotton, hides	Rio Janeiro	milrei	5200	South American.
Rockhampton	Q'nsland	transit, shipg, agriculture	wool	Rockhmptn	sterling	11,300	Colonial.
Rosario	La Plata	copper mfc, flour mills	wool,beef,ore,hides,tallow	Rosario	dollar	6450	S.Americn.
Sackatoo	Africa	trade centre	trade centre	Accra, Calabar	cowries	4600 *viâ* Accra	W.C. Afric.
Saffi	Morocco	agriculture, shipg	cereals, wool, oil	Saffi	dollar	1400	W.C.Afric.
Saga	Japan	transit	transit	Saga	yen, dollar	10,825	Japanese.
Sague la Grande	Cuba	transit, shipping, agr	sugar, molasses, rum	S. la Grande, Havana	dollar	4040	West Indian.
Saida	Syria	agriculture, shipg transit	sugar, coffee, cochineal, indigo, tobacco, fruit	Saida	piastre	3515	Levant.
Saigon	C. China	naval yards, agriculture	rice, teak	Saigon	dollar	9045	E. Indian.
St. Domingo	Hayti	ship trade centre	tobacco, wood, &c., centre	St. Domingo	dollar	3940	W. Indian.
St. Helena	Island	shipping	ship provisions	James Town	sterling	4450	Island.
St. Iago	Cuba	agriculture, shipping	sugar, molasses, rum, &c.	St. Iago	dollar	4000	W. Indian.
St. John's	N'foundland	fishing,shipbuilding,shipping	wood, fish, fur, lime	St. John's	dollar, sterling	2205	Island.
St. Kitts	Island	agriculture	sugar, oranges, shaddock	Basse Terre	dollar	3700	W. Indian.
St. Louis	U. States	emporium	transit entrepôt	Baltimore	dollar	4358	States.
St. Lucia	Island	agriculture, planters	sugar, molasses, rum, cocoa	Pt. Castries	dollar, sterling	3765	W. Indian.
St. Mary	Island	mfc cloth, agr, iron	shells, wax, turmeric, rice	Pt. S. Mary	dollar	6800	Island.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
St. Paul	U. States	emporium	transit entrepôt	New York	dollar	4710	States.
St. Paul de Loando	Africa	factories, agriculture, commerce	ivory, beeswax	St. Paul de Loando	dollar	4910	W.C.Afric.
St. Pierre	Guadel'pe	planters	sugar, coffee, rum, cotton, wool, &c.	St. Pierre	franc	3700	W. Indian.
St. Pierre	N'foundld	fishing, mining, agr	fish, oil	St. Pierre	dollar	2340	Island.
St. Thomas	Island	ship transit, entrepôt	sugar, fruit, entrepôt	St. Thomas	dollar	3700	W. Indian.
St. Thomas	Honduras	shipping, agriculture	mahogany, cochnl, indigo	St. Thomas	dollar	4900	Mexican.
St. Vincent	C'peVerds	ships' provisions, coal station	sugar, rum, molasses, arrowroot, cotton	St. Vincent	reis	2525	Island.
St. Vincent	W. Indies	transit, shipping	sugar, rum, molasses, coffee, dye woods	St. Vincent	dollar	3815	W. Indian.
Salem	U. States	cotton, saw, flour mills, distilleries, tannery	important transit	Salem	dollar	3045	States.
Salt Town	Africa	factories, agriculture	palm oil, kernels, cereals	Salt Town	dollar	3660	W.C.Afric.
Samana	Hayti	shipg, trans, agriculture	mahogany, tobac, prodc	Samana	dollar	3800	W. Indian.
Samarang	Java	leather, ctn fabrics, agr	ctn, coffee, sugar, indigo	Samarang	florin	8980	E. Indian.
Samarcand	Tartary	caravan entrepôt	transit	Kurrachee	rupee	7400 *viâ* Balkh	Cent. Asia.
Samoa	Navigator's I.	shipping, agriculture	cocoa-nut oil, fruits	Samoa	dollar	12,300	Island.
Samsoun	Turk'y, A.	transit, mining, shipping	tobac, nuts, ores, cereals	Samsoun	piastre	3370	Black Sea.
Sandwich	Islands	agriculture, whaling, fishing	sugar, cotton, hides, indigo, wool	Honolulu	dollar	13,330	Island.
San Francisco	California	foundry, refinery, entrepôt	wheat, trade centre	San F'cisco	dollar	13,670 sea	States.
San Miguel	C. Amerca	agriculture, mining	indigo	San Miguel	dollar	11,950	Mexican.
San Salvador	C. Amerca	agriculture, mining	indigo, tobacco, maize, cotton	Port S. Salvador	dollar	12,050	Mexican.
Santa Cruz	Island	shipping, agr, planters	sugar, rum, molasses	Santa Cruz	dollar	3750	W. Indian.

Santa Fé	U. States	emporium	agriculture entrepôt	Galveston	dollar	5758	States.
Santa Rosalia	Mexico	factory, works, mining	local	Port S. Ros'a	dollar	12,900	Mexican.
Santiago	C'pe Verds	agriculture	fruits	Santiago	reis	2530	Island.
Santiago	Chili	mining, agriculture, emporium entrepôt	cereals, pulse, tobacco, fruits, jerked beef	Valparaiso	dollar	8970	W. Coast.
Santiago de	Cuba	shipg, agriculture, tobacco	cigars, W. I. produce	S. de Cuba	dollar	4000	W. Indian.
Santos	Brazil	shipbuilding, shipping, agriculture	sugar, rum, rice, coffee, hides, tobacco	Santos	milrei	5360	S. Amercn.
Sarawak	Borneo	mining, agriculture	sago, E. I. produce	Sarawak	dollar	8550	E. Indian.
Savannah	U. States	transit, shipping	cotton, lumber, rice	Savannah	dollar	3750	States.
Savanilla	Colombia	entrepôt	cotton, divi, woods, hides, cereals, coffee	Savanilla	dollar	5020	S. Americn.
Scutari	Turkey, A.	mfc, silk, cotton fabrics	local with Constantinople	Scutari	piastre	3090	Black Sea.
Sena	Africa	emporium	transit entrepôt	Quilimane	dollar	7270	E. African.
Senegal Dist.	Africa	mining, agr, factory	gold dust, gum, hides, ivory, woods, wax	St. Louis	franc	2500	W. C. Afrc.
Sergipe	Brazil	agriculture	sugar, cotton, tobacco	Sergipe	milrei	4380	S. Americn.
Seringapatam	India	agriculture	produce transit	Cannanore	rupee	6610	Indian.
Seychelles	Islands	agriculture	ctn, coffee, cocoa, spice, tobacco, rice	Seychelles	franc	5900	Island.
Sfax	Tunis	textiles, transit	wood, oil, barilla, sponge, fruits, esparto	Sfax	piastre	2360	Medit.
Shanghai	China	trade centre	trade centre	Shanghai	tael, dollr	10,540	China.
Sherbro	Africa	shipping, transit	palm oil, kernels	Sherbro	sterling	3085	W. C. Afrc.
Shiraz	Persia	agr, otto of roses, enamel	transit, local trade	Bushire	kran	6680	Pers. Gulf.
Sierra Leone	Africa	oil factory, fishing, boat building	palm oil, pepper, ginger, wd, grd nuts, ivory, wax	S. Leone	sterling	3005	W. C. Afrc.
Simoda	Japan	agriculture	rice, cereals, cattle	Simoda	yen	11,205	Japanese.
Simon's Town	Africa	shipping	important transit	Sim'n's T'n	sterling	6067	Cape.
Singapore	Malay	shipping centre, vast emporium	coffee, gambia, tin, sago, spice, tapioca, gm, hides	Singapore	dollar	8345	Strts & E. I.
Sinope	Turkey, A.	arsenal, bldg wood, coal	local, coal depôt	Sinope	piastre	3390	Black Sea.
Sinoub	Turkey, A.	transit	tmbr, rice, salt, cord, oil	Sinope	piastre	3430	Black Sea.
Smyrna	Turkey, A.	trade centre, entrepôt	fruits, cotton, silk, wool, valonea, madder, op'm	Smyrna	piastre	2945	Levant.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Socotra	Island	agriculture, special aloes, dates	produce	Socotra	rupee, piastre	5295	Island.
Sourabaya	Java	shipbuilding, agr, shipg	rice, sugar, coffee, indigo, hides, rattans	Sourabaya	florin	9130	E. Indian.
Shendy	Nubia	caravan trade centre	transit	Suakim, Alexandria	piastre	4575 *viâ* Suakim	Red Sea.
S. Paulo	Brazil	agriculture, commerce	produce	Rio Janeiro	dollar	5250	S. Amercn.
Stillwater	U. States	centre lumber	lumber produce	New York	dollar	4033	States.
Suakim	Nubia	transit, pilgrim station	ostrich feathers, gld, ivry, salt, millet, hides	Suakim	piastre	4265	Red Sea.
Suez	Egypt	transit, entrepôt	transit, coal depôt	Suez	piastre	3380	Red Sea.
Surat	India	local commerce	cotton	Surat	dollar	6350	Indian.
Surinam	Guiana, D.	shipping, transit, agr	coffee, rum, sgr, cocoa, ctn	Paramaribo	dollar	4100	S. Americn.
Susa	Tunis	linen, shoes, shipping	olives, esparto	Susa	piastre	2205	Medit.
Swan River	Australia	mining, sawing, agr	wood, ore, wool, cattle	Swan River, Perth	sterling	7400	Colonial.
Swatow	China	entrepôt, shipping, agr	sgr, paper, grass clth, tobac	Swatow	tael	9890	China.
Sydney	N.S. Wales	trade centre	trade centre	Sydney	sterling	10,840	Colonial.
Tabasco	Mexico	shipping, agriculture	cacao, coffee, maize, rice, tobacco, dye woods	Tobasco, Fronterra	dollar	4790	Mexican.
Tabreez	Persia	mfc, agriculture, textiles	tobacco, woollen, cotton, textiles, shawls, fruit	Bussorah	piastre	7250	Persn. Gulf.
Taflet	Morocco	leather, manufactures, silk stuff, carpets, woollens	local, figs	Saffi	dollar	1700	W.C. Afric, Morocco.
Taiwan	China	shipping	ship transit produce	Taiwan	tael	10,005	China.
Talcahuano	Chili	ponchos, woollens, blankets	cereals, tallow, cheese, wine, brandy, wool	Talcahuano	dollar	8600	WestCoast.
Tamatave	Madagas.	agriculture, commerce	rice, cattle, poultry	Tamatave	dollar	6790	Island.
Tampico	Mexico	shipping, entrepôt	specie, hides, tallow, sarsaparilla	Tampico	dollar	4850	Mexican.

Tamsui	China	agriculture, coal station, depôt	rice, sugar, sesamum seed, turmeric	Tamsui	tael	10,210	China.
Tangiers	Morocco	agriculture	almonds, beans, seeds, frts	Tangiers	dollar	1300	Medit.
Tanjore	India	weaving, agriculture	cotton, tobacco, local	Negapatam	rupee	7260	Indian.
Tatta	Africa	caravan centre	entrepôt	Mogadore	cowries	1690	W.C. Afric.
Tauranga	N.Zealand	transit, shipping	wool, local	Tauranga	sterling	12,200	Colonial.
Tenedos	Turkey, A.	agriculture	wine, cereals, cotton, fruits	Tenedos	piastre	2950	Black Sea.
Teneriffe	Island	coal depôt, textiles, furniture manufacture	wine, fruits	Teneriffe	reis	1625	Island.
Teheran	Persia	smelting, foundry, transit	transit	Bussorah	piastre	7110	Red Sea.
Tehantuepec	Mexico	salt, cotton fabric, fishing	indigo, cochineal	Tehantu'pec	dollar	11,900	Mexican.
Tenasserim	India	rubies, gold dust traffic	tusks, horns, precious stns	Tenasserim	rupee	8100	Indian.
Ternate	Moluccas	celebrated spice	East Indian produce	Ternate	florin	10,000	E. Indian.
Tete	Africa	emporium	transit entrepôt	Quilimane	dollar	7420	E. C. Afric.
Tetuan	Morocco	lthr, sword ctlry, firearms	manufactures, fez, transit	Tetuan	dollar	1347	Medit.
Tientsin	China	important transit	entrepôt, cotton, tobacco	Tientsin	tael	11,165	China.
Tiflis	Russia	carpets, shawls, emporium	wine, manufactures, handkerchiefs entrepôt	Batoum	rouble	3850	Black Sea.
Timbuctoo	Africa	bags, cushions, pouches, mining	transit gold, salt	Mogadore	dollar, cowrie	2340 *viâ* M'gad're	W.C. Afric.
Tobago	Island	agriculture	sugar, molasses, rum	Tobago	dollar	3960	W. Indian.
Tobolsk	Siberia	metal, glass, soap, potash, distilleries	important transit	thro' Perm to Cronstadt	rouble	3812	N. Asian.
Tokat	Turkey, A.	dye, printing texts, mining	local	Samsoun	piastre	3440	Black Sea.
Tondo	Philip'nes	silk, cotton, fishing, agr	rice, fruits, wood, prodc	Tondo	dollar	9650	E. Indian.
Toronto	Canada	foundry, tan, brew, distil, factory, rope	flour, cereals, wool, furs, wood	Montreal New York	dollar	3370 *viâ* M'ntr'l	Canadian.
Trebizonde	Turkey, A.	mining, copper work	slk, wl, tobac, prdc, tran	Trebizonde	piastre	3650	Black Sea.
Trichinopoly	Hindostan	excellent cigars, ironwork, jewellery	manufacture, transit	Negapatam	rupee	7260	Indian.
Tripoli	Africa	crpts, mantles, wln stuffs, leather, potash	textiles, ivory, senna, saffron, esparto	Tripoli	piastre	2415	Medit.
Tripoli	Syria	shipping, agriculture, fishing	wool, sponge, cotton, tobacco, cochineal	Tripoli	piastre	3530	Levant.
Trinidad	Island	agriculture	sgr, cocoa, molss, rum, coff	Port Spain	dollar	3980	W. Indian.

Name.	Country.	Local Industry.	Local Market.	Nearest Port.	Currency.	Approx. Mileage from London.	Natural Division of Trade.
Tunis	Tunis	textiles, red wool caps, embroidered leather	oil, caps, soap, gold dust, hides, wool, pulse, crls	Tunis	piastre	2105	Medit.
Tuticorin	India	pearl fishing, shipping, chank fishing	cotton, local, senna, coffee	Tuticorin	rupee	6700	Indian.
Valdivia	Chili	agriculture	timber	Llico	dollar	8810	W. Coast.
Valparaiso	Chili	important trade centre	trade entrepôt	Valparaiso	dollar	8870	W. Coast.
Vancouver's	Island	quarry, fishing, agriculture	coal, lumber centre thro' Burraud inlet	Victoria, with Pt. Moody	dollar	14,485 sea	Island.
Vera Cruz	Mexico	agriculture	wood, sugar, produce	Vera Cruz	dollar	4855	Mexican.
Vizagapatam	India	manufactures, chessmen, jewellery, silver, horn	rice, tobacco, betel, turmeric, chillies	Vizagapat'm	rupee	7620	Indian.
Vladivostock	Siberia	shipping	important transit	Vladivostock	rouble	11,750	N. Asian.
Wallaroo	Australia	mining, agriculture, great copper-mines	copper, wool	Wallaroo Pt. Augusta	sterling	8600	Colonial.
Washington	U. States	arsenal, dockyard, transit	transit	Baltimore	dollar	3613	States.
Wellington	N. Zeal'nd	shipping, breweries, flour, saw mills	transit, shipping	Wellington	sterling	11,870	Colonial.
Wilmington	U. States	turps, rice, saw mills	lumber	Wilmington	dollar	3650	States.
Whydah	Africa	agriculture, slaves	palm oil, ivory, salt	Whydah	dollar	4070	W. C. Afrc.
Yakutsk	Siberia	barter ivory, furs, &c.	transit, barter	Okhutsk	rouble	13,300 *viâ* O.	N. Asian.
Yeddo	Japan	transit, commerce	silk, transit	Yeddo	yen, dollar	11,285	Japanese.
Yembo	Arabia	sea, commerce	ship provisions, local	Yembo	piastre	3930	Red Sea.
Yezd	Persia	caravan centre	transit	Bushire	kran	6880	Pers. Gulf.
Yokohama	Japan	commerce centre	silk, tea	Yokohama	yen, dollar	11,245	Japanese.
Zanzibar	Africa	agriculture, pottery	specie, rice, fruits	Zanzibar	dollar	6295	E. C. Afrc.
Zebu	Philippines	agriculture, transit with Manila	rice, sugar, cotton, tobacco, cacao	Zebu	dollar	9730	E. Indian.

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